

HISTORY OF SHIP SUBSIDIES IN THE
UNITED STATES

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HISTORY OF SHIP SUBSIDIES IN
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by

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Page 13

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CONTENTS

| | Page |
|--|--------|
| <u>Background of Maritime Development</u> | |
| First steps toward legislative assistance | 2 |
| Congressional concern for minor decline | 3 |
| Tonnage duties and discrimination | 4 |
| Bounties to fisheries; non-monetary aids | 5 |
| Pre-war (1812) conditions | 6 |
| Growth of European markets | 7 |
| <u>Period of Shipping Supremacy</u> | 10 |
| Sailing vessels and their place on the seas | 11 |
| Seamanship and maritime tradition | 12 |
| Lack of foresight toward steamships | 13 |
| Clippers and the "Golden Age" of shipping | 14 |
| Great Britain and the Cunard Line | 15 |
| Steam as new competition | 16 |
| The Act of 1845, first subsidy | 17 |
| Other British subsidies | 20 |
| The Act of 1847, with higher grants | 21 |
| Pacific operations by subsidized lines | 22 |
| The Collins Line - financial failure | 23 |
| Additional appropriations to Collins | 25 |
| Operations and accomplishments | 27 |
| Disaster and dissolution | 29 |
| Abrogation of the subsidy acts | 30 |
| <u>Decline of American Shipping</u> | |
| Extension of foreign subsidies | 31 |
| Public concern and a do-nothing period | 32 |
| The Ocean Mail Act of 1891-limited subsidy | 33 |
| Vessel classifications and other provisions | 34 |
| Minor accomplishments and major failure | 35 |
| Renewal of foreign subsidies, and their extension | 37 |
| Panama Canal Act - a turning point | 40 |
| Itself ineffectual, indicative of new attitudes | 41 |
| Unpreparedness for war | 42 |
| The Shipping Act of 1916 | 42 |
| Shipping Board and Emergency Fleet Corporation | 43 |
| Hasty effectiveness and long-range waste | 44 |
| <u>Awakening Consciousness of the Maritime Problem</u> | |
| The Merchant Marine Act of 1920 | 47 |
| Purposes and provisions | 48 |
| Accomplishments; surplus disposal | 50 |
| Subsidy allowances and construction payments | 52 |
| Appraisal of results | 53 |

| | |
|---|------|
| | Page |
| The Merchant Marine Act of 1928 | 54 |
| Extension of subsidy allowances | 55 |
| Results of new subsidies | 56 |
| Extension of Construction Loan Fund | 57 |
| Accomplishments of the Act | 58 |
| Implications of national defense | 60 |
| Further European subsidies and aid | 61 |
| <u>Present Policies and Outlook</u> | |
| The Merchant Marine Act of 1936 | 64 |
| Mail contract cancellation | 65 |
| New construction contracts under the act | 66 |
| Background of the act | 67 |
| The United States Maritime Commission | 69 |
| Subsidy provisions - construction | 70 |
| Subsidy provisions - operation | 72 |
| Appraisal of the act | 73 |
| Wartime developments | 74 |
| Post-war problems | 75 |
| European aid and marine development | 76 |
| Recessional tendencies in our marine | 77 |
| The E C A and American shipping | 78 |
| Re-expansion of construction subsidies | 80 |
| Appraisal of subsidies in present situation | 81 |
| Apparent permanence of subsidy system | 82 |

ILLUSTRATIONS

| Figure | Page |
|---|------|
| 1 Early Growth of American Ocean-going Shipping, Selected Years | 7 |
| 2 Shipping Subsidy Payments by Foreign Governments, Selected Years, Equivalent in Dollars | 38 |
| 3 Net Costs of Maintaining Service Under Mail Pay Provisions of Merchant Marine Act of 1928 | 59 |
| 4 Percentage of American Foreign Trade Carried in American Ships, 1937-1947, Annual Intervals | 76 |

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PREFACE

It is our purpose here to examine the efforts of the United States Government to follow the pattern of European states in implementing an effective Merchant Marine by means of subsidy payments, and to determine whether a policy of subsidization has effectively served the national welfare. Although present circumstances indicate clearly that financial support of our Merchant Marine is indispensable to our position as a world power, previous legislators were not always of that opinion. Contemporary viewpoints must be consulted, and historical references cited to examine the national efforts toward a fostering of trans-oceanic commercial activity.

From the formation of our Republic, merchant shipping has been an integral part of our commercial life. The rise and decline of this industry, the legislation enacted to aid it, and the results in the present day have been examined, and their effects noted.

Necessarily, current opinions as well as historical reference must be in part the source from which such a study is derived. Like all such histories, this will be subject to error insofar as it may incorrectly evaluate the conditions obtaining today.

0 Therefore it is our objective to analyze those factors

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which make a subsidy program a necessary adjunct to our national survival, and to determine from historical fact and opinion the elements of argument which possess the most validity in the light of present-day conditions, which themselves leave us no choice but to be competitively active on the highways of ocean commerce.

Consequently, our study must commence with the founding of our Republic in 1789, and must continue its analysis to recent months; only in so complete a panorama can our national necessities be revealed.

CHAPTER I

From its very beginnings, the United States has had a maritime tradition, and has enjoyed a commerce which was originally a result of its ascendancy on the high seas. Although we shall trace many declines from that high position, it is historical fact that even as an infant republic, even as colonials, without self-government, with mercantile restrictions, it was our good fortune to achieve importance as a trading nation.

Our Republic was unborn when the first American ship was launched (1631) in Salem, Massachusetts. This was the event which heralded the thriving shipbuilding industry that was later to serve as the foundation for much of our national wealth. The trade with the British West Indies, which was instituted at an early date, proved to be extremely profitable, especially for our fishing vessels, which in the colonial period amounted to a kind of Merchant Marine themselves. European nations began to call upon our surpluses of fish, whale oil, and foodstuffs; though no shred of credit is to be attached to it, the slave trade rounded out completely the cycle of shipping in which our early financial interests were engaged.

It is not our purpose here to examine the background of our shipping and shipbuilding industries, however. Their place in the commercial sun of the seventeenth and eighteenth

2

centuries, hampered though they were by such artificial controls as the British Navigation Acts, is part of our heritage; its importance need not further be belabored.

We shall instead examine the efforts which our statesmen have exerted to improve the status of our shipping after the Revolutionary War, and until the present time. Although several of the colonies passed such legislation antedating the War of Independence, it remained for our Congress to take the most effective steps which had yet been made, steps which were predicated in part upon the severe decimation of our fleet by wartime activity, and in part upon a recognition of the importance of a merchant marine for national defense. In this latter respect, our early Congresses showed more far-sightedness, youthful and unfounded though they were, than have many of our lawmakers since. An examination of the legislation adopted between 1789 and 1830 shows that no less than fifty acts were passed which in one way or another affected our ocean shipping.¹

In the efforts which England was making toward the protection of her own fleet, the West Indian Islands where formerly had existed a ready market for American products, were almost entirely closed to us, under the British rule²

¹American Bureau of Shipping, The American Merchant Marine (Washington: American Bureau of Shipping, 1933), p. 4

²The British General Order in Council of March 24, 1786.

which restated that foreign vessels were excluded from the West Indian trade, and American products such as whalebone and whale oil were no longer welcome in any British ports. Our answer was the first Tariff Act of July 4, 1789, which contained provisions specifically designed to foster the American shipping and shipbuilding industries.³

Our fleet in 1789 comprised only 123,893 gross ocean-going tons, roughly the equivalent of ten modern first-line steamers in carrying capacity.⁴ It is small wonder that our first Congress should so preoccupy itself with our shipping interests; it was a question of commercial survival. The incentives of colonial days had been removed by foreign market restrictions, high tonnage duties, and discriminatory tariffs. Increasing national development was calling into other fields much of the capital and enterprise which had formerly been devoted to maritime activity.

The Act of 1789 was the first legislative means used to foster our shipping. It was not a subsidy act, since no federal monies were disbursed at any time under its provisions, but it represented financial assistance of a kind, and was the background for other more forthright aid

³See below.

⁴Glover, J. G., and Cornell, W. B. "The Development of American Industries," 2nd Edition, (New York; Prentice-Hall, 1946), p. 628

21
in later years.

A blanket ten per cent rebate of import duties was provided on any goods brought to our ports in American bottoms; the tariff on tea was specifically stated to be twelve cents per pound if imported in an American vessel, and twenty-seven cents per pound if in a foreign vessel.⁵ This latter provision served effectively to exclude all foreign carriage of tea to United States ports, since no shipper could reasonably expect to absorb such a differential in duty.

Tonnage duties, which may be defined as clearance fees in port, were set at six cents per gross ton for vessels of American registry, thirty cents per gross ton for vessels of American construction and foreign registry, and fifty cents per gross ton for all others.⁶ It is readily apparent what effect fees of this kind would have on the shipping industry, and although it would be senseless to ascribe the improvement in our commerce entirely to this or other laws, there was herein at least the germ of assistance.

Congress throughout the last decade of the eighteenth century kept a watchful eye on the progress which our shipping companies were making, and implemented its watch-

⁵Paine, Ralph D. "The Old Merchant Marine." Chronicles of America Series, (New Haven; Yale University Press, 1919) p.96

⁶Ibid., p. 97.

The first part of the report deals with the general situation of the country. It is a very interesting and well-written account of the country and its people. The second part of the report deals with the specific details of the country and its people. It is a very interesting and well-written account of the country and its people. The third part of the report deals with the specific details of the country and its people. It is a very interesting and well-written account of the country and its people.

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fulness with legislation calculated to relieve as far as possible the onus of foreign competition. We approached the critical period of the Napoleonic Wars with our ocean-going shipping in the ascendancy.

In 1793 provision was made for payment of a bounty of from one dollar sixty cents to four dollars per ton for fish caught by American fisher vessels, to serve as an inducement for the furnishing of a "sea militia" training ground.⁷ The small margins of profit to which the fisheries had been reduced by the closing of the lucrative foreign markets made such a step necessary if we were to call any of our young men into the maritime service. A further incentive in the same act was the payment of two dollars per month by the government to each of the crew of approved fishing vessels. This was the first direct federal payment made to ship-owners for operating; the beginnings of our present government antedated its passage by only four years.

Other legislation, of a less pointed kind, also served to attract native capital and labor into marine industries. The harbor fortifications law of 1794, the provisions for furnishing marine and meteorological information to vessels, and the Act of 1790 relating to American seamen,⁸ were in-

⁷Spears, John R. "The Story of the American Merchant Marine." (New York: Macmillan Company, 1910), p. 199-200

⁸It was on this law that a later Congress was to base the Act of 1915, the Bill of Rights of American seamen.

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dications of a paternalistic approach which was to prevail through the so-called "Golden Age" of American shipping, and which would not be evidenced entirely by fiscal measures. The Congress in 1794 appropriated a sum sufficient to build six frigates, for the immediate purpose of subduing the Barbary pirates, who had long harassed our shipping, and for the long-run purpose of implementing the merchant marine by furnishing a Navy which could assure its place on the high seas.

A history which confines itself to government aid tends occasionally to overemphasize its influence on the progress of an industry. How the seacaptains of New England would have scoffed had they been told that their supremacy in this period was due to Congressional help! There is no question that the superiority of American seamanship, which was to make the clipper ship for a time the dominant ocean-going vessel, was of prime importance, and that the background of a maritime heritage and the quality of American shipbuilding were important adjuncts to the progress which we displayed. From all causes, at any rate, the first twenty years of our country's life were marked by a phenomenal growth of tonnage afloat on the commercial lanes of the world (Figure 1).

A realistic analysis must necessarily give due credit to the conflict in Europe. Even the most enthusiastic Congress could not legislate markets into existence; it remained for Napoleon to exercise his talents in activities

| Year | Gross Ocean-going Tons |
|------|------------------------|
| 1789 | 123,893 |
| 1790 | 355,070 |
| 1792 | 411,438 |
| 1793 | 447,000 |
| 1800 | 667,107 |
| 1807 | 840,163 |
| 1808 | 765,252 |
| 1809 | 906,855 |
| 1810 | 981,019 |
| 1811 | 948,247 |

Figure 1. Early growth of American ocean-going shipping, selected years.⁹

of a market-creating nature. The wars, which lasted intermittently from 1793 until 1814, took the British and French laborer, especially the farmer from his normal activities and left a productive void which was best filled by American surpluses; these surpluses commanded high enough shortage prices in an eager European market to serve as additional incentive to the entrepreneur who chose to carry them there. Therefore, we must not ascribe our tremendous growth in shipping entirely to local causes; as the leading neutral we enjoyed a position as belligerent supplier which swelled the ranks of our fleet and called more of our young men into the profitable marine trade. The income was not confined to the producers; merchant owners of vessels, the officers, and even the crews enjoyed a portion of the

⁹Data assembled from: Spears, John R., Op.cit., p. 146-147; Paine, Ralph D., op. cit., p. 98; Bogart, E.L., and Kemmerer, D. L. "Economic History of the American People," 2nd Edition. New York, 1948. p. 193.

war-born prosperity. Although the deprivations of both the French and the British contributed to the War of 1812, we cannot deny that at first the stimulus of a ready foreign market was a temptation that few of our mariners could resist.

Several reasons have been advanced for our supremacy on the high seas during this period. The fact that American vessels were seen in all the major ports of the world, and that American shipping interests became prosperous are our best indications that there was more to our early merchant marine than simply a romantic tradition of hardy sailors braving the terrors of the deep. Although it is true that the adventurous spirit of the Americans made itself felt, there are sound commercial reasons behind the tremendous increase which took place in the first decades of the nineteenth century.

The Napoleonic wars have been mentioned above. The virtual disappearance of French, Dutch, Spanish, and even many British merchantmen from the major world trade routes, coupled with war-born shortages in each of these countries, served as a primary impetus to our growth. The close proximity of ocean to forest in North America had always meant shipbuilding, and the increasing urbanization of the eastern seaboard was increasing as well the demand for foreign markets. In spite of the unfavorable conditions, notably the

7

restriction of our freedom on the high seas, it is apparent that there were many sustaining causes which were natural economic factors. It is interesting to conjecture as to whether the natural operation of economic laws would have independently produced these results, and whether government aid can be properly evaluated only during much later periods.

It is impossible for us, even from the vantagepoint of hindsight, to attempt to ascribe to each governing cause its true value in producing the effects which have become shipping history. In succeeding chapters we shall attempt to appraise certain of these effects, as they became a function of government assistance.

CHAPTER II

Although the War of 1812 gave us considerable pause in our shipping progress, with its end in 1815 we had the opportunity to enjoy the supremacy to which our tradition of shipbuilding and seamanship entitled us. No longer beset by British and French interference, our Marine entered its Golden Age.

This period was unique in that no special steps were taken by our Congress to help the merchant shipping industry. Aid was almost entirely lacking, except insofar as the tariff, by now an American institution, helped to prevent foreign competition for American registry. It is true that the regulations already passed concerning coastwise shipping were still in effect, and were to endure with only minor variations until the present time, but our ocean-going trade began to be carried to a greater extent in American bottoms largely because of their superiority to others. The vast soft-wood forests of the American coastal regions, and the hardiness and training of her officers and crews eminently equipped her to compete with the finest that other countries could offer. With the sailing vessel, the American merchant marine reached its zenith.(Appendix A)

In 1816 a shipping company called the Black Ball Line, with routes from New York to Liverpool, began a regularly

CHAPTER I

The first thing I noticed when I stepped out of the train was the smell of the sea. It was a salty, bracing scent that seemed to fill the air. I had heard that the coast was beautiful, but I had never experienced it before. The sun was shining brightly, and the waves were crashing against the shore. I felt a sense of freedom and adventure as I walked along the beach.

I had heard that the coast was beautiful, but I had never experienced it before. The sun was shining brightly, and the waves were crashing against the shore. I felt a sense of freedom and adventure as I walked along the beach. The sand was soft and warm under my feet. I looked out at the vast expanse of the ocean, feeling a sense of awe and wonder. The horizon line was so clear, and the sky was a deep, vibrant blue. I took a deep breath, savoring the fresh air and the salty sea breeze. It was a moment of pure bliss, and I knew that I had found a special place.

I had heard that the coast was beautiful, but I had never experienced it before. The sun was shining brightly, and the waves were crashing against the shore. I felt a sense of freedom and adventure as I walked along the beach.

71
scheduled service which continued almost without interruption for sixty years. On the first and sixteenth days of each month a packet left New York harbor for England; necessarily, this company enjoyed a prosperous life at first, skimming the cream from all ocean-going traffic, and commanding the highest rates for express and passengers. The slower "tramp" sailer carried the heavy cargoes on which no premium for fast carriage or regular trips existed, but the Black Ball Line was for many years the most famous and the most regularly patronized of all the sailing ship concerns,¹ whose number during this time was legion.

In point of fact, a history which attempts to portray the efforts of government at aiding an industry should hardly dwell upon that period when the industry would have no claim for aid. The era of the fast packet, and the almost immediately following period of the American clipper ship, were times when a Congress would have thought such efforts wasted. However, if only to afford a contrast with the later periods, when our government was beset with petitions to restore the United States to her proper place on the high seas, it is well for us at least briefly here to summarize the characteristics of these halcyon days of sail.

¹Paine, Ralph D., op. cit., p. 137.

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With the building of the first true clipper, a sailing vessel especially designed for speed and requiring outstanding abilities on the part of officers and crew if her full talents were to be utilized, the United States gained a place in world commerce which she held upon the advent of the improved steamship. Even the tea trade between the far east and the British Isles was largely carried by American clippers, many of which held speed records which have never been duplicated by sailing ships, and some of which are not customarily equalled by today's ordinary steamers.²

That seamanship was an important functional part of this era is unmistakeable. The peculiar construction of the clipper, which often seemed in appearance to be a glossy shell surmounted by thousands of yards of sail, made it an especially difficult ship to manage. Tales are told of seacaptains who used padlocks on the rigging, lest some chary bluejacket become too frightened by the submersion of the lee rail in solid water, and attempt to take in sail; and whether they all be true or not, the legends of our special aptitude for sailing these sea-going greyhounds must originally have possessed a germ in fact.³

The clipper owners needed no Congressional edict to maintain their position. The mail was carried across the

²Paine, Ralph D., op. cit., p. 142.

³Ibid., p. 166.

seas at express rates, with no hint of extra payments in the form of subsidies. Had it not been for the advent of steam in maritime commerce, it is likely that we would still possess the high place which we once enjoyed, and that Congressional action would never have been suggested as a means to trading power.

As in many other branches of endeavour, this country was first with an inventor of a practical steam-driven ship.⁴ In 1807 the Clermont, designed and built by one Robert Fulton, travelled upstream from West Street pier in New York City, to Albany, without once having recourse to sail; a dozen years later the Savannah, on May 24, 1819 sailed from New York to Liverpool, using steam for almost one eighth of the journey. Having established its primacy, so to speak, America immediately rested on its collective laurels and proceeded almost entirely to ignore the place of steam propulsion in the commercial world, allowing other countries rapidly to outdistance her in the development of this kind of vessel.

In many respects it is not surprising that the American ship-owners and merchants paid so little attention to the development of steamer commerce. Although the inland rivers

⁴Steam power had been experimentally applied to boats many years before Fulton's Clermont made her voyage; however, it is generally conceded that this was the first practical vessel ever constructed.

and even certain of the coastal waterways were soon plied with steamships, the outstanding superiority of the noble clipper seemed hardly deposable by the squat, ugly, and, strangely enough, considerably slower steam vessel, with its high costs of operation and its drastically different construction. American interests had become accustomed to wooden hulls with slender, speed-designed lines, which laboring under the churning impulses of the marine steam engines of that day would under any kind of pressure be torn to pieces in high-seas operations within a materially short period. The so-called elastic hull, which was designed to adapt itself to wind and wave with a minimum of torsion, was hardly usable with steam engines.

It is natural that American entrepreneurs would not abandon in favor of any unknown quantity that high position which their sailing vessels had achieved. It is equally natural that England, suffering from inferiority, would devote time and effort, and within a few years national monies, to the development of steamships. Historians have decried this signal evidence of American somnolence; it seems unfair to deplore an attitude of mind which was so consistent with the then known conditions. The owner of a Dreadnought or a Flying Cloud would have agreed with the consensus which held him foolish had he been so impractical as to attempt to replace these mistresses of the ocean with as untried a contrivance as an ocean-going steamer.

It was in 1839 that the British Parliament first made a subsidy award, and that to the Cunard Line for ocean-going service to the Western Hemisphere.⁵ Her previous attitude toward British shipping companies had been similar to ours: cooperative and protective, but seldom remunerative. We may trace most of our history of subsidies to this act of Parliament, after which we were soon to model our own legislation. Operating under a stipulation that awards were for steamships only, Cunard began regularly scheduled voyages to the United States in 1840,⁶ and has continued that service ever since, permanently and securely sponsored by British Empire revenues in the form of generous mail contracts.

We have often looked to the British commonwealth for guidance in commercial lawmaking. It is not surprising that shortly thereafter (1845) our Congress should have seen fit to pass a series of acts calculated to protect American shipping from foreign competition, and to make grants designed to bring the high American shipbuilding and operating costs closer to the gross income figures which British subsidies made competitively necessary. Conjecture has been made since as to whether it was the poor

⁵Spears, John R., op. cit., p. 254.

⁶Spears, John R., loc. cit.

choice of the American company which was to receive the most important of the grants (1847) rather than any basic fallacies in the policy itself, which made our first attempt at subsidization such a remarkable failure at giving us a position on the ocean steam routes.

It was an apprehensive eye which Congress and our shipping companies cast at the fledgling Cunard Line which already, two trying years after its first operation, was beginning to take from American holds much of the prize cargo and premium express, and from American cabins most of the time-conscious passengers. While figures indicate that under optimum conditions the best clippers could make shorter runs than could the Cunarders, it is obvious that these conditions could not always prevail,⁷ and that the best clippers comprised only a small part of our fleet. Small reason that the businessman, guided by market motives rather than abstract patriotism, should choose the Cunard steamship, which completed its run adverse winds notwithstanding, within a surprisingly unvariable interval, rather than the more spectacular clipper, which might shatter a record with his cargo aboard, or might on the other hand be bested by unfavorable winds, causing him losses which several voyages might not recoup.

⁷Even the Dreadnought, which often completed the Boston-Liverpool run in less than fourteen days, was known once to have required fifty-eight days due to contrary winds.

Consequently in 1842 Thomas Butler King, Chairman of the House Naval Committee in Congress, proposed two bills⁸ which were aimed at circumventing the rapidly changing picture in England's favor. Their provisions can be summarized as follows: the Postmaster General of the United States was to be empowered to enter into contracts with shipping companies if such companies would fulfill schedules which he approved; such contracts were to run for at least four years and not more than ten years, renewable at the option of the Postmaster General; such companies as were approved must hold themselves ready to transport the United States mails between their ports of call; in consideration of such contracts, the Congress was to appropriate funds sufficient to cover the reasonable cost of such service.

After nearly two years of consideration, the Congress passed both of these bills in their original substance as the Act of 1845, and immediately negotiations were entered into with various shipping companies which had expressed an interest in steamship operation. It was apparent that no sailing vessel could possibly fulfill the commitment to regular scheduling, regardless of how precise its sailing dates might be. As a consequence it was several months

⁸HR 681 and HR 685, 28th Congress, 1st session.

before shipbuilding could be started, and the companies which received awards were not operative until late in 1846.

Among the first were several small coastwise steamers already in operation when the Act was passed. The most famous of these lines, all of whose subsidies were small in amount, was the New York and Charleston Steamship Company, which with its S.S. Southerner, followed soon afterward by the S.S. Northerner, plied between New York and southern ports with mail, express, passengers, and the kinds of cargo which for many years had been transmitted by coastal shipping. It is not to operations of this kind to which we must direct our prime attention. More important were the ocean-going companies, for those were the enterprises calculated to derive most benefits from the legislation.

On May 8, 1846 the Ocean Steam Navigation Company was incorporated for the purpose of conducting scheduled steamship operations between New York and Bremen, via Southampton and Le Havre. However, even with the subsidy of \$400,000 per year which the Postmaster General authorized for this company, it was extremely difficult to interest American capitalists in such an untried venture, and most of the control finally rested in foreign hands. Two ships, the S.S. Washington and the S.S. Hermann were put under construction, and on June 1, 1847 the Washington completed the

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first leg of its maiden voyage at Southampton. This and all later voyages of this company proved to be slow and costly; the Cunard company's regular trips in every case took less time than those of the Ocean Steam Line. It was natural under these circumstances that express and passengers should still travel by the more efficient British vessels, which were granted another increase in subsidy⁹ to counteract the possible effects of our Congressional action. Throughout its life, this Ocean Steam Line suffered from financial difficulties since it was insufficiently capitalized and faced with substantial debt, and was encumbered by the lack of engineering techniques in this country for the proper construction and maintenance of steam vessels.

Part of the justification for the subsidies was the claim that a large merchant marine would serve as a reservoir of naval strength in the event of war. It is unlikely that the vessels sponsored by the legislation of 1845 would have been especially valuable against those already perfected by European states, most of which had been forced to make strides born of necessity in the development of ocean-going steam engineering. It was a natural consequence that before 1850 all other major powers were our superiors in the designing, building, and operating of

⁹Clark, William H. "The Story of our Merchant Marine" (Boston; L.C. Page & Company, 1938), p. 258

steamships, and that the naval auxiliary argument is more valid today than it was a century ago.

While the Ocean Steam Navigation Company was truly a pioneer in high seas steam operation, pointing the way for many future companies, it was representative of the companies subsidized by the Act of 1845 in its poor earnings. No dividends were ever paid to its owners; even the liberal subsidy which Congress allowed was insufficient to cover the margin of high maintenance and operating costs, far in excess of those of the Cunard company, with its lower wage scales and its acquired skills in extracting the longest useful life from a steam vessel. Despite the earnest and continuing efforts of its principals, it is not surprising that the company was moribund even before its subsidy was finally withdrawn (1858) by an economy-minded Congress.

Our efforts at control of Atlantic shipping remained ineffective; the Act of 1845 was at best a halfway measure, especially since the operations of the Royal Mail Steam Packet Company began to expand Great Britain's control through the Caribbean. This concern, heavily subsidized¹⁰ by the British Parliament, served to stifle still further our shipping in the West Indies, although it must be confessed that the supposedly commercial motives of the British

¹⁰The Royal Mail Company's first subsidy was the then staggering sum of \$1,200,000, awarded in 1841.

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government are weakened by close examination. The ships of the Royal Mail line, built according to Admiralty specifications and manned by officers of the British Navy, carried almost no mail, and made stops at British ports in the Caribbean hardly long enough to load express and permit passengers aboard. It was obvious that the Royal Mail's subsidy was geared as much to threats of war between Great Britain and the United States and to a British desire for a trans-Nicaraguan canal as it was to an effort to foster British commercial interests.

The 1845 subsidies, then, proved to be a failure, except with regard to the coastwise whippers which were flourishing before the Act and might easily, under the restrictive rule of the Act of 1817 which limited to American bottoms all coastwise traffic, have continued to prosper even without such a subsidy.

More productive was the Marine Act of March 3, 1847, which extended the power of the Postmaster General to contract with steamship operators, and which increased the appropriation allowable for mail payments. We shall not examine the operations of the small companies which made an effort to capitalize upon its provisions, nor even such lines as the New York and Havre Steam Navigation Company which, though well financed and generously aided by a subsidy of \$150,000 per year, never achieved recognition, failing to compete effectively even with the American lines

which vied with it.

Rather we shall consider the two most important operations which stemmed from this piece of legislation. The United States Mail Steamship Company was authorized to conduct regular operations between New York and Panama, via coastal cities, to transport all United States Mails bound for the west coast of the United States, and to receive for its efforts a grant of \$290,000 per year. The adjunctive routes from the west coast of the Panama Isthmus were granted to the Pacific Mail Steamship Company, which was to connect by overland route across the isthmus, and would complete the journey to California for a subsidy of \$308,000 per year. September, 1848 saw the first voyage of this joint operation, which was to continue regularly until the subsidy was withdrawn ten years later.

Both of these companies were financially successful;¹¹ it is worthy of note, however, that over a dozen small companies operating sailing clippers also made money from these routes, even though they were forced to sail around Cape Horn to achieve their western goal. We must therefore attribute only part of the success to the subsidy; the gold rush to California was the primary cause. Passenger traffic alone was sufficient to support any transportation company

¹¹Spears, John R. op. cit., p. 273.

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which could take the gold-hungry adventurers by a route easier to negotiate than the difficult overland passage. Even with coal at thirty dollars per ton, the steamship companies experienced only one major cost difficulty, which resolved itself well within the profitable range:¹² high wages had to be paid to crews to induce them not to desert as soon as the ships docked in San Francisco.

The New York-San Francisco routes, then, were an eminent success, and marked the first occasion when an ocean-going steamship company under the American flag paid dividends to its investors. Had the traffic of later years offered the same incentives, it is very likely that our maritime status would sooner and more effectively have been secured. The combination routes cited above represented the American answer to the Royal Mail operation in the Caribbean; it is unfortunate that the true proving-ground should still have been the North Atlantic, where the considerably less vulnerable Cunard Line continued to consolidate itself.

By the same act of 1947 a subsidy was granted to the New York and Liverpool United States Mail Steamship Company, popularly known as the Collins Line after its founder and

¹²Profits were so large that Commodore Cornelius Vanderbilt was paid a \$56,000 per month premium if he would agree to keep his ships out of the traffic (Spears, op. cit., p 273)

principal stockholder, Edward K. Collins, previously owner of two successful coastal sailing ship concerns. It is to this company that we turn for an analysis on the basis of the most liberal subsidies yet offered by an enthusiastic Congress. It is unfortunate that a major variable in the form of Collins' breathtaking extravagance should be introduced to vitiate any conclusions which might be derived from such a study.

Collins and several of his business associates had been instrumental in the passage of the Marine Act of 1847, and it is likely that Congress was unduly influenced by his claim that he would cross the Atlantic with steamships in ten days or less. The Cunarders generally took from twelve to fifteen days for the same voyage, and it was the Cunard company which had thereby wrested from American shipping companies most of their transatlantic traffic.¹³

The contract between the Collins Line and the Postmaster General was signed in November, 1847, and provided for a payment of \$19,250 per voyage, which on the schedule authorized meant an annual payment of \$385,000. Stipulation was made that at least four vessels be provided by the company for the service, of at least two thousand tons each, and that a federal mail agent and a naval officer be included

¹³Keir, Malcolm. "The March of Commerce," (New Haven: Yale University Press, 1927), p. 101

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in the complement on each voyage.¹⁴

Even with a paid-in capital of \$1,200,000, Collins was unable to pay for four ships which had an average cost of over \$700,000, and was therefore from the very beginning faced with high debt service costs. Besides this, the company spared no expense to make the Collins ships more luxurious and better appointed in every way than the vessels of the Cunard Line.

It is not surprising that within six months of the contract negotiations, Collins was back in Washington asking for funds, even before operations had begun. The Act of August 3, 1848 might be called the Collins Act; its only provision was for an advance of \$25,000 per month per ship until commissioning date, with liberal repayment terms. At the very outset, then, we see Congress compelled by other than economical motives. Even the high costs which the Collins Line was already incurring seemed worthwhile if we could re-establish our supremacy over British shipping; Collins boasted publicly, and reiterated his claims to the Congress, that he would drive the Cunarders from the Atlantic by the excellence of his operation. That Collins should have attempted by extravagance to best the canny Scot owners of the Cunard Line at their own kind of business

¹⁴Spears, John R. op. cit., p. 265.

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furnishes a sardonic sidelight.

The Collins vessels were completed in the spring of 1850, and authorities agreed that they were the best steamships yet produced in American yards.¹⁵ In spite of this, however, the hulls were not perfect for steam propulsion; too much of the sailing vessel design remained. They were therefore not the zenith of designing for which the Navy Department had hoped, and consequently afforded the Congress its first of many disappointments.

Service began with the voyage of the S.S. Atlantic on April 27, 1850. The line was faced from the beginning with a series of circumstances which translated our national pride and Collins' stubbornness into high costs. In 1850 our sailing vessels were supreme on all seas except the North Atlantic and the Caribbean. Collins was famous for successful operation of sailing packet companies, and had effectively been adjured by Congress to show his heels to the Cunarders. Consequently, his captains pushed the vessels past their operating limits, incurring extremely high maintenance charges on already costly ships, and using quantities of coal which in that day were phenomenal. Later information furnished to Congress by the company indicated that the average coal cost per voyage amounted

¹⁵Keir, Malcolm. op. cit., p. 100.

to \$8,612.28, representing nearly two thousand tons of coal consumed between New York and Liverpool. Even so, had this been the worst of the cost picture, the final result might have been different.¹⁶

But in one sense Collins made good his promise. In May of 1851 his S.S. Pacific made the voyage from New York to Liverpool in nine days, twenty hours, and in August, 1852, the S.S. Baltic crossed in nine days, thirteen hours. During its term, the Collins Line began systematically to share the enviable operating position which formerly had belonged to the Cunard Company alone.

In answer to Collins' challenge, the Parliament raised the subsidy to the Cunarders to \$16,500 per voyage, stipulating in the Council directive that effort be made to equal and surpass the Collins achievements in speed and appointment. Since no increase whatever was seen in the quantity of British mail which moved across the Atlantic, we may say that this was the first time that the British government dropped all pretenses; tacit admission was made that the payment represented an outright and unequivocal anti-competitive grant.

¹⁶In a statement of average costs and revenues for the first twenty-eight voyages, the Collins Line showed:

| | |
|-----------------------------|--------------------|
| Revenue from passengers | \$21,292.65 |
| Revenue from freights | 7,744.20 |
| Subsidy payment | <u>19,250.00</u> |
| Total per voyage | <u>48,286.85</u> |
| Against expenses per voyage | <u>\$65,215.59</u> |

the Commission is of the opinion that the Commission should
be authorized to make such investigations as may be necessary
to determine the facts in connection with the above-mentioned

allegation, and to report thereon to the Commission as soon as
practicable.

It is further recommended that the Commission be authorized
to employ such personnel as may be necessary to carry out the
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It was shortly thereafter that Collins presented himself at a Congressional committee meeting with another petition, and because of the progress which he had made, because full proof had not been submitted as to his ships' inadaptability to wartime use, and because of a marked anti-British sentiment still prevailing, his grant was raised by Act of March 3, 1854 to \$33,000 per voyage, for twenty-six scheduled voyages per year, a total of \$858,000 for twelve months of operations. The lifeblood of his company was consequently renewed, and he received additional effective help with the outbreak of the Crimean War in late March of 1854, which drew several of the Cunard vessels into British naval service.

Collins continued his operations; package freight, which we now call express, passengers, and mail occupied most of his load-carrying space. It was another two years before so-called deferrable cargoes began to be diverted into Collins holds. Growing revenues were short-lived; by Act of August 18, 1856, the Congress suddenly gave notice to Collins that his original subsidy rate would soon be restored, to supplant the more recent and more generous grant.¹⁷ This was the first indication of a new

¹⁷Spears, John R. op. cit., p. 270.

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Congressional economy-mindedness which within eighteen months was to cancel all mail contracts, and repeal the subsidy acts.

It was in 1856 that other evil descended upon the Collins Line. Its S.S. Arctic was rammed off Cape Race with a loss of 307 lives, and on September 23, 1856 the Pacific sailed west from Liverpool and was never heard from again. Although insurance proceeds in the aggregate amount of \$1,250,000 were paid to the company, the bad publicity was extremely damaging, and it began to feel the pinch of decreasing revenues severely, even before the subsidy was finally cut to its original figure of \$19,250 per voyage on June 30, 1857. Service was continued, but the Panic of 1857, which was world-wide in its scope, effectively curtailed commerce to the point where the Collins Line reluctantly ceased operations. The last voyage was made in January, 1858, and within a few weeks a bankruptcy proceeding marked the Company's demise.

That Congress was governed by diplomatic and military considerations is in part true. Collins was primarily the American answer to Cunard; that he spoke in a more spendthrift tongue was unfortunate. The sumptuous cabins and silver bridge fittings of the Atlantic and the Adriatic were not adapted to the tightness of trans-Atlantic competition; these vessels felt the pinch of cost as soon as

they were put into service. Wonder has been expressed¹⁸ that the Collins Line managed to survive for so long a time.

We must, however, give Collins and his associates credit for realizing that the American merchant marine to survive must compete with Samuel Cunard and the British Parliament, and to the Congress which financed him for a maritime vision and foresight which its successors did not apparently possess. It seems likely that sectionalism played its part in the revocation¹⁹ of the mail contracts in 1858, since southern Congressmen had been clamoring for subsidies for companies serving southern ports, of which the only one endorsed was Charleston. With the series of calamities which plagued shipping, and notably the Collins Line, in 1856, the Midwest, always apathetic to our marine problem, added its weight, and the subsidy laws were repealed.

¹⁸Spears, John R. op. cit., p. 172

¹⁹Bogart, E. L., and Kemmerer, D. L. op. cit., p. 211.

1. The first part of the paper is devoted to a general discussion of the problem.

2. In the second part we shall consider the case of a single particle.

3. The third part is devoted to the case of a system of particles.

4. In the fourth part we shall consider the case of a continuous medium.

5. The fifth part is devoted to the case of a system of continuous media.

6. In the sixth part we shall consider the case of a system of particles and continuous media.

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CHAPTER III

In the meantime, Great Britain was extending her domain with additional subsidies to other companies, and Germany and France entered their bids for dominance. In the fiscal year 1850-1851 the Parliament awarded the sum of \$3,699,853 in subsidies,¹ an amount more than sufficient to secure for British concerns the traffic which they so earnestly desired. The depression of ocean-going freight rates and passenger fares as a result of foreign subsidies was a constant tendency; even had our operations not been harnessed by high building costs and high wage scales, it is unlikely that American interests could have competed effectively with the maritime forces set in play by generous European governments. The diversion of our domestic capital into railroads, mines, canals, and manufacturing establishments was inevitable, since our expanding economy offered many avenues more fruitful in terms of profit than the already declining shipping industry.

The Hamburg-American Line, subsidized by the German government in 1846, changed entirely to steam locomotion in 1853,² giving impetus to British generosity to its own companies, and still further weakening the position of

¹Cyclopedia of American Government, New York, 1904. p. 610.

²Mitchell, B. & L. P. "American Economic History" (Cambridge; Houghton-Mifflin, 1947), p. 415

The first of these is the fact that the
 number of cases of disease has been
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the American interests. The North German Lloyd Steamship Company, with liberal subsidy, was put in operation in 1856, with voyages from Bremen and Hamburg to British and American ports, and to German colonies in Africa and the Far East. From the humble beginning in 1839, with Cunard's \$425,000 annual subsidy,² the spread of foreign shipping continued, subsidized not only in Britain and Germany, but in France, Italy, and even Austro-Hungary and Japan. Commercial nationalism was approaching its zenith in those countries which had before so effectively been challenged by our maritime standing.

For over three decades the United States watched its shipping crowd into the hulls of foreign vessels, watched its citizens travel under other flags, with hardly a protest. The most articulate demands for a merchant marine of suitable scope were virtually ignored, despite the urgency with which pleas were made.

For example, President Arthur in his annual message to Congress in 1882, said:

"This subject is of the utmost importance to the national welfare. Methods of reviving American shipbuilding and restoring the United States flag to the ocean-carrying trade should receive the immediate attention of Congress."

Nor was President Arthur the only one of our chief

²Mitchell, B., & L. P. op. cit., p. 415.

executives who expressed concern. To quote President Harrison, also in a message to Congress:

"There is nothing more justly humiliating to the national pride and nothing more hurtful to the national prosperity than the inferiority of our merchant marine compared with that of other nations. I am an advocate of economy in our national expenditure, but it is a misuse of terms to make this word describe a policy that withholds an expenditure for the purpose of extending our foreign commerce."

Undisturbed by these adjurations, it was not until 1891 that Congress believed the situation serious enough to warrant national cognizance, and to justify the application of federal dollars to the assistance of the solution. In that year less than ten per cent by value of our foreign trade was being carried in American vessels. (Appendix A)

An aroused Congress finally approved a maritime bill which became law on March 3, 1891. Known as the Ocean Mail Act of 1891, its appropriation was drastically reduced from its original figures even before it emerged from Committee. Consequently, an appraisal of the results of this new subsidization must be tempered by the economy-mindedness which still prevailed.

The substance of the Act was the provision for grants which it would award as mail pay to any applicant capable of transporting the mail overseas, according to a speed and tonnage classification established along the limits

as indicated here:

| | |
|-------------------|------------------------|
| Class "A" vessels | \$4 per nautical mile |
| Class "B" vessels | 2 per nautical mile |
| Class "C" vessels | 1 per nautical mile |
| Class "D" vessels | 66¢ per nautical mile. |

With the assistance of the navy department, the law established the specifications for each class as to minimum tonnage and minimum top speeds:

| | | |
|---------|-------------------|-----------------------|
| Class A | 8000 tons or over | 20 knots |
| Class B | 5000 tons or over | 16 knots |
| Class C | 2500 tons or over | 14 knots ³ |
| Class D | 1500 tons or over | 12 knots. |

Despite the weighty consideration apparently given to the operating factor, the amount allowed was insufficient. For a voyage from New York to Liverpool, for example, the subsidy payment would amount to approximately \$3,000 per voyage for the best and fastest of existing steam vessels. When we remember that Collins failed to compete even with a \$33,000 payment per voyage, it is small wonder that the Act of 1891 had so little effect upon our shipping. Certain companies already in operation, like the Pacific Mail Company and The Red "D" Line, which operated between New York and Venezuela, naturally welcomed the subsidy, but the primary purpose of the Act was the fostering of American shipping to the point where an auxiliary fleet of merchantmen would be available in wartime for troop transport and scouting. A mail subsidy of

³Clark, William H. op. cit., p. 265-266.

only \$4 per mile for the fleetest and heaviest of ocean-going steamers could hardly be expected to stimulate ship-building or capital formation.

Our most conclusive proof of the inadequacy of the payment lies in the fact that the Postmaster General advertised for public acceptance fifty-three major routes; only eight operations resulted therefrom, and the total expenditure made under the provisions of the Act amounted to only \$29,630,000,⁴ slightly more than the normal poundage rate for mail, which has always been paid even to unsubsidized vessels.

It is true that the American Line, soon to become part of the International Mercantile Marine Corporation, acquired four new ships as a result of its anticipation of higher mail revenues, and the Mallory Steamship Company increased its mileage considerably, but by and large our shipping was not greatly extended.⁵ Among the companies awarded mail pay for new routes were the Pacific Mail Company, New York-Colon-San Francisco; the Pacific Mail Steamship Company, San Francisco to the Orient; the Ward Line, New York-Havana-Mexico; and the Oceanic Steamship Company, San Francisco-Honolulu-Sydney.

An interesting commentary on the relative uselessness

⁴Cyclopedia of American Government, p. 614.

⁵Spears, John R. op. cit., p. 381.

of this Act lies in the formation of the Red Star Line, which was originally the International Navigation Company of Philadelphia. Impressed by the relative liberality of the Belgian government, which was offering a \$130,000 per year, ten year contract to a shipping company of suitable scope, the International Navigation Company's owners organized a Belgian subsidiary to which its facilities were transferred, and which ~~was~~ received under Belgian laws the subsidy contract. Known as the Red Star Steamship Company, this line was the first major steamship concern to fly a foreign flag while owned by American operators.⁶

The principle behind the act was satisfactory. Distressed by the decline in our shipping, Congress was eager to see an auxiliary merchant fleet reborn, and was willing to use federal funds to promote such a happy outcome. Poor planning and advice led to a rate structure so low as almost entirely to nullify the good intentions displayed by the Act's passage.

This is not to say that we as a nation were completely unaware of our responsibility to our shipping interests. The last decades of the nineteenth century marked a substantial growth in other service which without federal funds

⁶Clark, William H. op. cit., p. 266.



27

would not other wise have been provided. Such things as harbor dredging, chart publication, lighthouse building, meteorological service, and an efficient Coast Guard would have proved impossible for even an amalgamation of shipping companies to support. To this extent our government was helpful, more so even than many European states. But our tariff policy had become protectionistic, which redounded to our commercial disservice, and although the services mentioned above were rendered without specific fees, they did not represent positive financial aid. Comparatively, we must reserve the word aid for the successful efforts of European governments.

Great Britain had begun in 1840 with its first payments to Cunard, and by 1900 could look back upon an uninterrupted stream of subsidies to this and other companies for a sixty-year total of \$283,906,000, which was therefore the considered British price for an effective Merchant Marine. Although these subsidy payments were not extended to all British shipping companies, the paternal attitude which they indicated was an inducement to the formation of substantial shipping capital in the British dominions.

The German government in 1885 renewed its contract with the North German Lloyd Line, extending it for fifteen years with an annual payment, nominally for mail carriage, of \$1,047,000. This contract in turn was renewed in 1900,

increasing the annual amount to \$1,330,000.⁷ In the meantime the 1890 contract with the Hamburg-American Line which carried with a \$214,000 annual subsidy, was also renewed, and the amount increased to \$390,000.⁸

France paid to its merchant marine the sum of \$19,503,701 from 1881 to 1890, and extended its payments further after the turn of the century. That France is not considered eminent as a maritime nation was due more to her weakness in international markets than to lack of assistance to her shipping.

Figure 2 gives a comparison of subsidy payments made by other governments in selected years during a period when we were making virtually none, due to the ineffectiveness of the Act of 1891.

| | | |
|---|------|--------------|
| Great Britain & Colonies | 1909 | \$ 9,689,384 |
| France | 1908 | 13,423,737 |
| Japan | 1910 | 5,413,700 |
| Italy | 1909 | 3,872,917 |
| Spain | 1910 | 3,150,012 |
| Austro-Hungary | 1908 | 2,984,530 |
| Germany | 1908 | 2,301,029 |
| Figure 2. Shipping Subsidy Payments by Foreign Governments, Selected Years, Equivalent in Dollars. ⁹ | | |

⁷Spears, John R., op. cit., p. 328.

⁸Keir, Malcolm. op. cit., p. 104.

⁹Tabulated from the Cyclopedia of American Government, p. 618.

1. The first part of the paper is devoted to a general discussion of the problem.

2. In the second part we consider the case of a single particle.

3. The third part is devoted to the case of a system of particles.

4. In the fourth part we consider the case of a continuous medium.

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12. The twelfth part is devoted to the case of a system of continuous media.

| α | β | γ | δ | ϵ | ζ | η | θ | ι | κ | λ | μ | ν | ξ | \omicron | π | ρ | σ | τ | υ | ϕ | χ | ψ | ω |
|----------|---------|----------|----------|------------|---------|--------|----------|---------|----------|-----------|-------|-------|-------|------------|-------|--------|----------|--------|------------|--------|--------|--------|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 |
| 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 |
| 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |

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This is not to state, however, that all Americans were blind to the difficulties, nor unaware of the travesty of an increasing national production being carried to ocean-served markets in foreign vessels. One of the most articulate public pleaders for subsidies was the Scientific American Magazine, which waged an editorial battle for years, decrying the shame of a major power being without the ships to carry its trade. Only slightly less pressing were the editorial comments of the New York Times and the Atlantic Monthly.

Nor were our legislators consistently inactive. On December 19, 1898, Senator Hanna introduced the Hanna-Payne Bill, which called for a review of the maritime problem and the appointment of a commission to revise drastically the mail payment scale; the bill was defeated summarily.¹⁰ On March 22, 1903, Senator W. P. Frye introduced a similar bill, which passed the Senate but was defeated in the House and not recalled.¹¹ These abortive attempts, however, are indications that certain of our lawmakers were not blind to the problem; that their efforts fell short of accomplishment is not to their discredit.

¹⁰Cyclopedia of American Government, p. 614.

¹¹Ibid., p. 615.

Strictly speaking, the turning point toward modern maritime policy came with the passage of the Panama Canal Act of 1912. Although we have seen considerable lapses since into the apathetic attitude displayed prior to its passage, we may select this year as the time when an awakening populace began to realize the tremendous need for suitable ocean shipping, and became aware that normal progressive forces were not sufficient to give such an industry stimulus.

The most important provision of the Panama Canal Act was the stipulation that foreign-built vessels less than five years old might be admitted to American registry for coastwise or foreign traffic. At first glance it might be suspected that this departure from our normal protectionist attitude would succeed only in further depressing the American shipbuilder; as a matter of fact the rate structure for Panama Canal clearance opened the way for another of the cost-reducing aids. Under the terms of this act, an American operator might acquire a cheaper foreign vessel, operate it on a trans-Isthmian route, and still have it registered under the American flag, giving himself thereby a substantial saving in canal tolls. Needless to say, the opening of the Canal on August 15, 1914 effectively eliminated the Cape Horn passage for world trade.

The Act was amended on August 18, 1914 to allow

21
American operators to register foreign-built vessels of any age. There is no question that this did tend to depress American shipbuilding. Cost of construction exceeded that of European shipyards by as much as fifty per cent.

Another provision of this Act forbade the passage of any "company-owned" steamships through the Canal. This effectively curtailed the railroads in their threats to operate subsidiary steamship companies to avoid the loss of revenues which the opening of the Canal would otherwise mean.

The Act of 1912, and the Act of 1914 amendatory thereto, must be appraised from the standpoint of progress rather than of true and final accomplishment. Although traffic on American ships did increase, it is difficult to separate the achievements of the Acts from those ad-
duceable to the World War, which enabled us as the leading neutral to establish the same kind of artificial position which we had enjoyed during the War of 1812.

We must turn, then to the First World War as another factor in our maritime history. This is not deprecatory of the spirit behind the Panama Canal Acts, for which a prostrate maritime industry was duly grateful, but simply to approach as rapidly as possible the formative period of today's merchant marine, and to attempt to analyze, on the basis of the legislation of the past thirty years,

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the true significance of a government's friendliness toward our shipping. We must not forget either the constant and growing tendency of foreign countries to help their marine industries; Cunard, made a baronet in 1859 for his devotion to the cause of an ocean-going England, was only one of many European entrepreneurs who have never dispatched a voyage without a portion of their country's funds safely paid in hand.

The outbreak of hostilities in Europe in 1914 shocked us into the realization that the feeble efforts made to this time towards the fostering of a merchant marine had been ineffective. Motives of caution and necessity diverted practically all foreign vessels into their own waters. As the leading neutral and the provider for many of the world's needs, we faced growing surpluses of commodities, saw eager foreign markets for them all, and realized simultaneously the inadequacy of our shipping to haul them. The Shipping Act of September 7, 1916 was born as much of economic necessity as of an ideological desire to be the "allied lifeline;" no important faction, sectional or otherwise, opposed its passage.

This Act created the United States Shipping Board, which was to continue as the guiding organization of our marine commerce until 1936. It was empowered by the Act to do all within its power to encourage the development

of an American merchant marine, and in the words of the Act, was created

"for the purpose of encouraging, developing, and creating a naval auxiliary and naval reserve and a merchant marine to meet the requirements of the Commerce of the United States with its territories and possessions and with foreign countries; to regulate carriers by water engaged in the foreign and interstate commerce of the United States, and for other purposes....." 12

The Board was authorized to compare at all times the progress of other nations with that of the United States, and to regulate strictly the foreign ownership of American-built vessels. This latter provision was consistent with our relaxing of restrictions under the Panama Canal Acts, which, lest American vessels be diverted into foreign registry, actually allowed foreign vessels to come into our citizens' hands.

The most important single provision of the Act, however, and that which would have produced the most forthright results had it not been for our ultimate participation in the conflict, was the clause which gave to the Board the power to organize one or more corporations for the maintenance and operation of a merchant fleet.¹³ Under this provision, on April 16, 1917, the Emergency

¹²American Shipping Bureau. op. cit., p. 9.

¹³Ibid., p. 10.

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Fleet Corporation was organized under the laws of the District of Columbia, capitalized with the full grant of \$50,000,000 which Congress had allowed in the Act for that purpose, and proceeded immediately to let purchase contracts to shipwrights, and then to operate the vessels in the carriage of troops and materiel to foreign shores.

Necessarily, in an operation so quickly implemented, and subject as are most such organizations to government inefficiency and political waste, the long-run commercial aspects of the problem were neglected. Never had American crews complained so bitterly of American-built steamships, and with apparent good reason. They were constructed of any material which a hard-pressed Navy Department would approve: steel, iron, wood, and even concrete. Their inefficiency is already a matter of legend, but they served the purpose. It was hardly within the province of a war-harassed government to stipulate that the usual 20-year expected life of a steamer be a condition for its building. The most important matter was to help the Allied cause, and the means to that end were rightfully considered to be less important.

Necessity strangled at birth the possible beneficent allowances of the Act, and diverted its powers into the war machine. The notorious Hog Islander, the 1918 counterpart of the Liberty Ship, though it spewed its rivets into the Atlantic current and was disastrously short-lived,

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answered an immediate purpose which should truly have been given precedence over any long-run concern for our commercial future. With regard to merchant marine administration, however, the Act of 1916 points out one element of our national philosophy which was to plague us even until December 7, 1941. Ours was a rich economy, born of tremendous resources and a highly skilled and undrainable labor market; it was nevertheless often a case of "too little and too late." Only the tremendous quantity of vessels--more than twenty-five hundred of them--redeemed their inherent weaknesses. When one was out of commission, there were two more to take its place. At this time, therefore, our maritime policy was geared to national necessity; far better to give Pershing what he needed than to make long-range plans for the merchant marine of the future!

The Act was intended to furnish honest and forthright aid to the shipping industry. As a peacetime effective help, it was never properly tested, since the Act of 1920 aupplanted it before its true effectiveness could be measured under peacetime conditions. However, evidence of the insufficiency of the original \$50,000,000 appropriation, grandiose as it had seemed at the time of the Act's passage, lies in the increase which took place in this fund; it was increased first to \$750,000,000, and finally to \$2,884,000,000 before the war's end, so costly

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was the transportation problem with which a militant America found itself confronted.

War had furnished major dislocations, which must necessarily have made themselves felt in the shipping industry as in every other province of our economy. Although our regular steamship lines played a noble part in the transporting of troops and materiel to the war fronts, our marine did not become overnight the world power for which the authors of the Act apparently hoped.

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Chapter IV

Faced with the readjustments of the post-war era, the government found most of its previous legislation inadequate to cope with the maritime problem. Consequently on June 5, 1920 the Congress passed the Merchant Marine Act of 1920, commonly referred to as the Jones Act.¹ This act had several provisions designed specifically for the fostering of our private marine industry through government intervention and help.

The powers of the Shipping Board were extended to allow it to dispose of the tremendous fleet which wartime exigencies had produced. Although many of the ships, as has been indicated above, fell far below usual operating standards, the bulk of the fleet was adaptable to an overhauling which would equip it for commercial service. A comparable function, it should be noted, was conferred upon the Reconstruction Finance Corporation after the recent war, with respect to so-called surplus equipment.

Thus was the immediate purpose of the government to be served. It was the owner of a wartime fleet to which it could not possibly dedicate the requisite time and effort, and was faced as well with public reluctance for a government

¹Bogart, E. L., & Kemmerer, D. L. op. cit., p. 722.

CHAPTER I

The first part of the book is devoted to a general survey of the subject. It is divided into three sections: the first dealing with the history of the subject, the second with the principles of the subject, and the third with the applications of the subject. The second section is the most important, as it contains the principles which govern the whole subject. The third section is also important, as it shows the practical application of the principles. The first section is less important, as it is only a historical survey.

The second part of the book is devoted to a detailed study of the subject. It is divided into two sections: the first dealing with the principles of the subject, and the second with the applications of the subject. The first section is the most important, as it contains the principles which govern the whole subject. The second section is also important, as it shows the practical application of the principles. The first section is less important, as it is only a historical survey.

The third part of the book is devoted to a detailed study of the subject. It is divided into two sections: the first dealing with the principles of the subject, and the second with the applications of the subject. The first section is the most important, as it contains the principles which govern the whole subject. The second section is also important, as it shows the practical application of the principles. The first section is less important, as it is only a historical survey.

to compete in too forthright a manner with private industry, especially an industry standing so poorly in a competitive world market.

The purposes of the legislation may be cited to indicate the nature of the approach; some of the most important duties of the Board were:

"To investigate and determine what steamship lines lines should be established and operated between the United States and foreign ports for the development and maintenance of the foreign and coastwise trade of the United States and an adequate postal service; to sell vessels under its control to responsible citizens of the United States who will agree to maintain such lines under terms as the Board may deem advisable.

"To cooperate with the Secretary of War in encouraging the development of ports and transportation facilities in connection with the water commerce over which the Board has jurisdiction.

"To recondition and keep in suitable repair and operate, until sold, all vessels under its control either directly or through the United States² Shipping Board Emergency Fleet Corporation....."

Membership of the Board was increased from five men to seven, due to the expected additional administrative work. In addition to the duties prescribed by the selling provision, the Board was required to assist the operators in maintaining a merchant fleet consistent with the Board's standards.

Assistance was to be rendered first from the Construction Loan Fund, which was set up by Congressional appropria-

²American Shipping Bureau. op. cit., p. 11.

tion, and was to furnish capital which could be lent to operators interested in modernizing existing vessels or in building new ones, the proviso being that at least 50% of the amount must be furnished by private capital. At moderate rates of interest, in many cases as low as three and one-half per cent per annum, the Board was authorized to lend the remaining fifty per cent, repayable in annual instalments over a period not to exceed twenty years. Under the terms of this fund, fifteen new vessels were built for existing steamship companies by American shipbuilders, for a total of 106,478 gross tons; the government lent the sum of \$18,629,500, representing approximately fifty per cent of the total construction cost, to the various companies, among them the American Line, the Coamo Steamship Corporation, and Eastern Steamship Lines, Inc.³

It was apparent that private capital still did not possess sufficient incentive to risk itself in the unfavorable trans-oceanic traffic. The Construction Loan Fund amounted to \$125,000,000. Since only \$18,000,000 was employed at this time, it is obvious that enterprisers did not yet believe it worthwhile to take advantage of the loan facilities made available to them.

³American Shipping Bureau. op. cit., p. 15.

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However, it is not our purpose here to cavil at the failure of the Act to accomplish its worthy purpose, but rather to indicate the new trends of thinking being employed, and the new awareness of the sad state of our maritime commerce.

By authority of the Act, all foreign ships under temporary American registry as of February 1, 1920, were allowed to remain as American flag carriers, a provision which gave a competitive benefit to those operators who had acquired foreign vessels at lower costs, and by allowance of the wartime emergency laws had been allowed to document them as American ships. The coastwise laws were extended to give benefit to domestic companies by expanding the American shipping monopoly to "all island territories," which now included Guam and American Samoa.⁴

We see that the Board was now given considerable benevolent authority over our transoceanic shipping. It was authorized and empowered to determine what steamship routes would best serve the public convenience and necessity, and by means of favorable selling prices on surplus vessels, to implement these routes for their operators or prospective operators. Decision must be made first that a route was valuable to our economy, after which, by means of its powers,

⁴ Ibid., p. 11.

and in 1914 he was elected to the U. S. Senate
for the 11th district of New York. He was re-elected
in 1916 and 1918. He was a member of the Senate
Committee on Education and Labor.

He died in 1921.

He was a member of the New York State Bar Association
and the New York State Association of Attorneys.
He was also a member of the American Bar Association
and the American Association of Lawyers.

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the Board was expected to take such steps as might be necessary within its jurisdiction to make a place for that route in our maritime scheme of things.

Recommendations were to be made to the Secretary of War when the Board believed that port and terminal facilities were inadequate for a self-supporting traffic flow, on the very reasonable theory that quartermaster operations during a war might be hampered by the very difficulties which had beset merchant shippers. It was in this kind of advisory capacity that the Board best served its purposes; public funds could effectively be diverted into the avenues where they were most needed.

The Emergency Fleet of surplus merchant vessels was to be maintained in proper condition, and operated for the account of the Board until scrapped or sold. Most of the wooden vessels and all of the concrete were scrapped within eighteen months of the passage of the Act, with virtually no salvage value, but over ninety per cent of the steel vessels were sold to private companies, at an average price of ten percent of the original cost.⁵ Only at such bargain rates could capital be induced to risk the difficulties of such a highly competitive market as ocean-going steam operation.

⁵Glover, J. G., & Cornell, W. B. op. cit., p. 722.

12

Section 28 of the Act allowed for preferential rail rates for goods or passengers connecting with American shipping lines, provided suitable voucher was made that such connection was actually contemplated. It is unfortunate that this provision should have been implemented during a period when the railroads were faced with no special incentives toward rate-cutting; for the most part this provision remained inoperative.

As to outright payments and grants, the original scope of the Act was ideally suited to subsidization on a most practical scale. All mails so far as practicable were to be carried by American rather than foreign steamers. The Shipping Board, through the Postmaster General, was empowered to establish "fair and reasonable" rates for mail carriage, and to enter into contracts within the limits of Congressional appropriation. It was this last which proved the mail plan's undoing. An economy-minded Congress, six months later, before a single contract had been signed, stipulated in the appropriation for 1921 and thereafter that no contract should be of more than one year's duration; that, furthermore, the rates should be subject to review at termination of each such contract.

No blame can be attached to American shippers for failing to establish or expand facilities on the basis of a 365-day commitment. The amounts of capital required for

The first part of the paper is devoted to a general
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effective competition with foreign companies, and even for fulfillment of the joint requirements of the Shipping Board and the Postmaster General, were too great for so short-lived a guarantee of return.

In its efforts to maintain and operate the unsold portions of the fleet until final arrangements were made for each vessel, the Shipping Board sustained a public loss in the fiscal year 1921 of over \$50,000,000, hardly, it must be admitted, an incentive to Congress to expand its facilities.⁶

From the vantage point of hindsight, it is possible for us to inspect the weaknesses of this legislation, but its contemporaries had no such opportunity for analysis. That it was ineffective, clumsy and poorly integrated is apparent: from 1924 to 1929 only \$4,801,953 was paid in mail subsidies to six companies.⁷ But we must remember that it was basically an emergency measure, and moreover that it possessed all the usual weaknesses of new and unprecedented lawmaking.

Our present maritime policy truly dates from 1936, but before this date there was another act, superior to the Act of 1920 in its more realistic generosity, but still

⁶Clark, William H. op. cit., p. 313.

⁷American Shipping Bureau. op. cit., p. 17.

25th Nov 1954 (Wednesday) - 1st day of the week.

Very cold & dry. Windy. No rain.

Temperature 35°F. Wind N.W. 10-15 mph.

Clouds 10-20%. Visibility 10 miles.

Humidity 60%. Dew point 30°F.

Pressure 30.0 in. Hg.

Wind direction N.W. 10-15 mph.

Clouds 10-20%. Visibility 10 miles.

Humidity 60%. Dew point 30°F.

Pressure 30.0 in. Hg.

Wind direction N.W. 10-15 mph.

Clouds 10-20%. Visibility 10 miles.

Humidity 60%. Dew point 30°F.

Pressure 30.0 in. Hg.

fumbling in its efforts to help a struggling shipping industry. By 1928, our marine was in sorry condition. Many of the smaller companies, unable to compete with heavily subsidized foreign concerns, were forced to close their doors entirely, and this during the prosperous decade of the 1920's. Although the major shipping companies, especially those receiving even the fragmentary aid provided by the Act of 1920, managed occasionally even to pay dividends, by and large the industry was in distress. The Act of 1928 was Congress' new answer.

The Merchant Marine Act of 1928, passed on May 22, 1928, was co-authored by the sponsor of the Act of 1920, and is known as the Jones-White Merchant Marine Act. This piece of legislation was occasioned primarily by the growing obsolescence of American steamers, and a realization that the expected useful life of the American merchant fleet was shrinking to an alarmingly low figure.⁸ Competition on the basis of quality, especially in passenger traffic, was almost impossible; British and German steamers, especially were carrying the premium traffic, leaving an insignificant balance for American ships. Cargo as well was more and more finding its way into foreign holds;

⁸Glover, J. G., & Cornell, W. B. op. cit., p. 637.

necessarily a merchant faced with the changing complexion of a foreign market was interested primarily in speed and reliability. Public pressure and the concerted efforts of the shipping groups resulted in the passage of the new act, which embodied many of the principles of the old, but expanded them and made them more adaptable to current needs.

Under its provisions, mail contracts could be awarded for a period of ten years, provided either new shipbuilding or modernization of old ships by the applying company brought operations up to the standard demanded by the Board in applying its new and higher rates, which varied with different routes, and were applied largely on the basis of the differential needed to cover costs so that American freight rates and passenger fares could be dropped to compete with foreign countries' shipping.⁹ A ten-year contract would furnish an incentive to such shipbuilding and overhauling, where a one-year contract was falling far short of the mark.

To enable shipping companies to arrange for such building without impairing already weak working capital, the Construction Loan Fund was increased to \$250,000,000, and only twenty-five per cent of the cost need be met by

⁹ Ibid., p. 637.

private capital, with the Board furnishing the remaining seventy-five per cent, at rates of interest which varied from three and one-half per cent for vessels slated for foreign service to five and one-quarter per cent for ships for the coastwise trade.¹⁰ As a result of the stimulus furnished by these more liberal facilities, thirty-one first line passenger and cargo combination ships, nine tankers, and two sea-trains were built, and a total of forty existing vessels reconditioned. The inherent weakness in the loan policy was that too little emphasis was placed upon the ordinary freighter; consequently, ships designed especially for cargo were still too few, and much American ocean freight still sailed in foreign bottoms.¹¹

Mail aid was more generous than it had ever been in the history of the country. Commitments for \$300,000,000 were signed by the Shipping Board and the Postmaster General with American and foreign companies, on ten year contracts paying annual totals of \$30,000,000. The fact that certain¹² of these subsidies actually were awarded to foreign companies is a clear indication that American shipbuilding capital was still not free enough to serve the purpose.

¹⁰American Shipping Bureau. op. cit., p. 13.

¹¹Glover, J. G., & Cornell, W. B. op. cit., p. 638.

¹²Among these were Cunard; Compagnie General Transatlantique; Hamburg-American; White Star; North German Lloyd; Swedish American Line, etc. American Shipping Bureau, op.cit.p. 26.

The Act embodied in its text a reaffirmation of the purposes of the Act of 1920; activities were to be predicated upon the assumption that a strong merchant marine was indispensable to the welfare of the nation, and that the government was obliged to bolster its strength in the most practical, economical, and realistic manner. Such is the stuff of which all recent maritime legislation has been compounded; motive and purpose cannot be impugned. It is only concerning methods that argument can be raised.

The Construction Loan Fund, in particular, seemed to be essential. Largely as a result of the new liberality displayed in policies of ship mortgaging under the 1928 law, by January 1, 1932, our marine comprised six hundred vessels, of over 3,500,000, gross tons,¹³ a respectable nucleus for a fleet. In all, fifty-seven vessels were constructed within the limitations of the Board's high standards, and forty more were reconditioned.¹⁴ Of the more than \$300,000,000 which was thereby spent, approximately eighty per cent was paid to laboring groups, either directly to shipbuilding companies, or indirectly as a result of purchases made otherwise to implement ocean-going operation. Since loans could be made for as much as seventy-five per cent of cost, and repaid over a period of twenty years, it had now become

¹³American Shipping Bureau. op. cit., p. 7.

¹⁴Ibid., p. 15.

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more within the realm of possibility that capital be risked in the shipping business, especially when mail contracts with a long life term were offered as the final reward. Even so, as was noted above, capital was only free compared with previous years; on an absolute basis, it still did not suffice for complete accomplishment.

The Loan Fund furnished to sixteen steamship companies the sum of \$116,183,237.40 for new construction of forty-two¹⁵ vessels of 458,084 gross tons, among them such vessels as the Manhattan and the Washington for United States Lines, each of 25,000 tons; the Mariposa, the Monterey, and the Lurline, each of 18,000 tons, for the Oceanic Steamship Company; the Santa Rosa and the Santa Paula, each of 11,000 tons, for the Panama Mail Steamship Company, one of the oldest shipping concerns in the United States; the Morro Castle and the Oriente, each of 11,000 tons, for the Atlantic Gulf and West Indian Steamship Lines; the President Hoover and the President Coolidge, each of 22,000 tons, for the Dollar Steamship Lines.¹⁶ The cost of such vessels as these, and even of the smaller ships built under the terms of the Act, would have been prohibitive for an unsubsidized and unaided industry. These ships, small in number though they still

¹⁵Fifteen vessels were built under 1920 terms, making 57 in all.

¹⁶American Shipping Bureau, op. cit., p. 15.

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were, represented accomplishment of a positive nature when we consider the disastrously inefficient marine which we possessed just before World War I, seventy years after Great Britain, for example, had become a first-class steam-operating ocean power.

In addition, \$12,922,057.26 was lent to companies to overhaul and modernize forty vessels, of 269,155 gross tons, which had previously been in operation, but were of insufficient size, speed, carrying capacity or efficiency to conform with the rules set down by the Board for the awarding of mail contracts.¹⁷

The mail contracts themselves were more generous than any previous such instruments. As Figure 3 indicates, the true cost of subsidization must be the difference between contract award and the actual poundage cost which would have to be paid by any shipper of a similar commodity. The net

| Fiscal Year | Contract Award | Poundage Rate | Net Cost |
|-------------|-----------------|----------------|-----------------|
| 1929 | \$ 9,304,217.82 | \$1,685,159.97 | \$ 7,619,057.85 |
| 1930 | 13,066,440.87 | 2,272,730.44 | 10,793,710.43 |
| 1931 | 18,818,039.76 | 2,710,645.82 | 16,107,393.94 |
| 1932 | 22,431,791.04 | 3,267,453.33 | 19,164,337.71. |

Figure 3. Net Costs of Maintaining Service under Mail Pay Provisions of Merchant Marine Act of 1928.

is the true subsidy, and is of course somewhat lower than

¹⁷American Shipping Bureau. op. cit., p. 15.

¹⁸American Shipping Bureau. Tabulation from report of Postmaster General, 1932.

The first part of the paper is devoted to a discussion of the
 various methods which have been proposed for the determination of
 the rate of reaction. It is shown that the method of initial rates
 is the most reliable, and that the method of integrated rates
 is only applicable when the reaction is of a simple order.

In the second part of the paper, the effect of temperature on the
 rate of reaction is discussed. It is shown that the rate of reaction
 increases with increasing temperature, and that the increase is
 more rapid at higher temperatures. The Arrhenius equation is
 derived, and it is shown that the activation energy of a reaction
 can be determined from a plot of $\log k$ against $1/T$.

The third part of the paper is devoted to a discussion of the
 effect of concentration on the rate of reaction. It is shown that
 the rate of reaction increases with increasing concentration, and
 that the increase is more rapid at higher concentrations. The
 law of mass action is derived, and it is shown that the order of
 reaction can be determined from a plot of $\log k$ against $\log c$.

| Time (min) | Concentration (M) | Rate (M/min) |
|------------|-------------------|--------------|
| 0 | 0.100 | 0.000 |
| 10 | 0.090 | 0.001 |
| 20 | 0.081 | 0.002 |
| 30 | 0.073 | 0.003 |
| 40 | 0.066 | 0.004 |
| 50 | 0.060 | 0.005 |
| 60 | 0.055 | 0.006 |
| 70 | 0.050 | 0.007 |
| 80 | 0.046 | 0.008 |
| 90 | 0.042 | 0.009 |
| 100 | 0.039 | 0.010 |

The fourth part of the paper is devoted to a discussion of the
 effect of catalysts on the rate of reaction. It is shown that
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 catalysis is discussed, and it is shown that the order of reaction
 can be determined from a plot of $\log k$ against $\log c$.

the contract figure. Still, a government commitment of \$300,000,000 over a period of ten years was definitely of major importance as it was an indicator of future policies.

Two other provisions of the Act must also be mentioned. All government personnel were required to travel on government business by American steamship routes and on vessels flying the American flag. While this seems to belabor what should have been the obvious, the luxurious accommodations offered by foreign carriers had on many occasions tempted even our diplomatic and military personnel away from our ships.¹⁹ No more trenchant commentary can be made as to our sad position in the maritime world than that we must by edict insist that our government employees use our own vessels in their business travels.

The place of the merchant marine in national defense also came under consideration in the Act of 1928. Specific provision was made that in time of national emergency, as determined by presidential proclamation, the Board be authorized to seize any ship on which an outstanding loan balance was due, or which was receiving government payments under a mail contract, paying a "fair and reasonable" value to the owner, and to deliver such ship to the Armed Services or to operate it on their behalf for troop carriage or

¹⁹American Shipping Bureau. op. cit., p. 14.

materiel transport.²⁰ Thus did the act take cognizance of the importance of a merchant marine in our national security.

It is difficult, as it was with many of the other legislative instruments, to appraise completely the results of this Act. In the first place, it had been operative for only two years when all of our industries were stricken by a world depression, which caused our foreign trade to drop drastically.²¹ Secondly, the executive machinery under the Act was not well enough integrated to prevent the careless administration of certain of the funds, a condition which we shall examine at length in the succeeding chapter. And thirdly, we were forced by circumstances to make awards of certain of the mail contracts to foreign carriers. Therefore we cannot truly state that all of the funds were directed where they could be most fruitful, and reluctantly concession must here be made that this Act, too, represented incomplete aid.

In the meantime, European governments were active in their espousal of commercial causes. The German government had eight of its representatives appointed to the twenty-eight man Board of Directors of the merged Hamburg-American

²⁰American Shipping Bureau, op. cit., p. 14.

²¹Ibid., p. 14.

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and North German Lloyd Company, and has in addition set aside the equivalent of \$3,000,000 to subsidize the scrapping of certain overage vessels. The French government aided in the refinancing of the Compagnie General Transatlantique by public offering of the securities of that company in 1931.

Italy began in 1932 to pay outright subsidies to cargo vessels in addition to the amounts which it had been setting aside for years for extra mail contracts, and loaned the sum of \$15,600,000 for construction of the Rex and the Conte di Savoia, paying as well a portion of the insurance premiums on these vessels. This is the kind of aid which European governments apparently think is worthwhile, in addition to their traditional and generous subsidies for the carriage of international mail.²²

In the words of the Honorable Daniel C. Roper, Secretary of Commerce:

"Perhaps the outstanding weakness of the Act was its failure to bring about a sufficient number of replacements to modernize a fleet which has become so obsolete that without generous subsidies it can no longer compete in international trade.....²³

²²The entire discussion here of foreign efforts is taken from the American Shipping Bureau's "The American Merchant Marine," p. 140-143.

²³"Our Merchant Marine To Be," in the Scientific American for October, 1936. p. 208-211.

THE SECRETARY OF THE INTERIOR, WASHINGTON, D. C.
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WASHINGTON, D. C.
TO THE HONORABLE MEMBERS OF THE HOUSE OF REPRESENTATIVES
AND SENATE, AND TO THE PUBLIC
SIR: I have the honor to acknowledge the receipt of your letter of the 10th inst., and in reply to inform you that the same has been forwarded to the proper authorities for their consideration. I am, Sir, very respectfully,
Yours, very obediently,
J. M. [Signature]

Very truly yours,
J. M. [Signature]

Very truly yours,
J. M. [Signature]

62

Intervening between the Act of 1928 and the Act of 1936, which marked the beginning of our present policies came only the Economy Act of 1932, whose sole provision relating to the Merchant Marine was to reduce the membership of the Shipping Board from five to three men. Its primary result was the placing of an additional administrative burden upon the surviving members, to which might be attributed at least a portion of the policy failure.

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1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes the need for transparency and accountability in financial reporting.

2. The second part of the document outlines the various methods and techniques used to collect and analyze data. It includes a detailed description of the experimental procedures and the statistical analysis performed.

3. The third part of the document presents the results of the study. It includes a series of tables and graphs that illustrate the findings of the research. The data shows a clear trend of increasing activity over time.

4. The fourth part of the document discusses the implications of the findings. It suggests that the results have significant implications for the field of study and may lead to further research in this area.

5. The fifth part of the document concludes the study. It summarizes the key findings and provides a final statement on the importance of the research.

6. The sixth part of the document discusses the limitations of the study. It acknowledges that there are certain factors that may have influenced the results and that further research is needed to confirm the findings.

7. The seventh part of the document provides a list of references. It includes a comprehensive list of all the sources used in the study, including books, articles, and online resources.

8. The eighth part of the document includes a list of appendices. It contains additional information that is relevant to the study but is not included in the main text.

9. The ninth part of the document includes a list of figures. It contains a series of graphs and charts that illustrate the data presented in the study.

10. The tenth part of the document includes a list of tables. It contains a series of tables that present the data in a structured and organized manner.

Chapter V

By far the most significant single piece of legislation which the Congress has ever enacted for the furtherance of our foreign shipping was the Merchant Marine Act of 1936,¹ which superseded all other such legislation, and gave to the government through the United States Maritime Commission, successor to the Shipping Board, the wherewithal to accomplish what for so many decades had been of paramount importance, but had never successfully been implemented. The sweeping authorities granted by the law are best illustrated by a quotation from its purposes;

"To further the development and maintenance of an adequate and well-balanced American merchant marine, to promote the commerce of the United States, to aid in the national defense, to repeal certain former legislation, and for other purposes."

One of the first and most important steps taken by the Commission under its authority was the outright repeal of the mail contracts, which admittedly had for many years been a superficial approach to aid. Negotiations were begun immediately with all steamship companies which held contracts under the provisions of the Act of 1928 for the immediate cancellation of such agreements; by June 30, 1937,

¹H. R. 8555.

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largely due to the negotiating ability of Joseph P. Kennedy, first Chairman of the Commission, all such contracts, totalling \$73,000,000, were cancelled at a cost to the government of only \$750,000.² In place of the mail contract provision, which admittedly allowed certain diversion of funds, and occasionally even the lining of private pockets (see below), there were substituted two other kinds of subsidy; payments of portions of the cost for new ocean-going vessels, and loans for most of the balance; and outright payments to companies operating routes to foreign markets. In exchange for these more generous and more effective payments, the Commission was to supervise operations very closely, and to require the filing of periodic financial information. A close grip on the purse strings was one of the characteristics which was to distinguish the Maritime Commission from its predecessors.

Before attempting to appraise exhaustively the results of the new Act, a brief survey of its first accomplishments might be made. One of its first duties was to make a complete examination of the actual status of our marine, and to determine exactly what needed to be done. This survey indicated that by 1942 over ninety per cent of all our

²Special Report on the Merchant Marine. Fortune Magazine, September, 1937. p. 57.

merchant vessels would be overage, according to the standards of quality which the Commission was to demand for subsidized operation. Recommendation was made, consequently, that a well-directed effort be made to build at least fifty first-line ships per year for ten years. The onset of the second World War was to accomplish this in spite of the financial limitations which would otherwise have curtailed such an ambitious design.

By November 1, 1940, contracts had been signed by shipping companies with shipbuilders, under Commission auspices, for one hundred seventy-nine vessels of all types. Seventy-three had been launched, and fifty-one were in service, including the superliner America, which was to make its bid as America's merchant flagship. Subsidies ranging from thirty to forty-five per cent of the cost were awarded to reduce the differential between costs of American and foreign construction, and operating subsidies in 1937, 1938, and 1939 were to average approximately \$13,000,000 in each of these years.³ This was obviously the kind of concrete aid for which the industry had been waiting, and spurred by the impetus of the threat of another European war, we find that the percentage of our

³Fortune Magazine, September, 1937. p. 63.

67

trade moving in American bottoms began to show the increase for which we had hoped. (Appendix A)

Aside from its abilities to subsidize, however, the Act possessed one further goad to private operators to busy themselves with establishing their supremacy. Should the subsidy program fail to provide enough vessels of American registry, the Commission itself was authorized to build and operate such vessels, in order to secure the place on the high seas to which our legislators felt us to be entitled.

For its more specific accomplishments, we must turn to the background of the Act, where its purposes were born. It was a mixture of a renewed realization of national necessity and a senatorial muckraking which the abuses of the Act of 1928 had brought about.

Briefly, then, we must consider this background. Senator Hugo Black of Alabama, later to become a Justice of the Supreme Court of the United States, and Senator Kenneth McKellar of Tennessee, Chairman of the Senate Post Office Committee, were aroused for some reason to an awareness of certain irregularities in government settlements with the steamship companies,⁴ and instituted a full-scale investigation, in which they were presently joined by

⁴It has apparently never been revealed whether the first hints came from a disgruntled applicant for a mail contract or from an indiscreet employee of the Shipping Board offices.

Postmaster General James A. Farley. It was found as a result of the investigation that many mail contracts had been awarded not on the basis of the letter of the law, but for personal favors received; that operating standards were not being maintained by the companies receiving certain of the contracts, and that government aid was therefore apparently not best implemented by mail pay, but would be by more strictly controlled measures. As a result of recommendations made to him, President Roosevelt in March, 1935, asked the Congress for legislation designed to circumvent the evils inherent in the loosely-knit organization of the Shipping Board, which he had already transferred to the jurisdiction of the Department of Commerce, probably for closer watching.⁵

This is not to cast any aspersions upon the men who comprised the greater part of Shipping Board membership through these years, nor to impugn the Post Office department. The Board, as has been noted above, was reduced in size by the Economy Act of 1932, and apparently quite legitimately had lost touch with certain of the important details necessary to proper administration of post-office contracts. The unpopularity of mail subsidies, however, does undoubtedly stem from the 1935 investigations, which

⁵ Fortune Magazine, September, 1937. p. 76-77.

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were thoroughly aired, and received considerable public attention.

After considerable Congressional debate, marked by the introduction of the powerfully supported Bland-Copeland Bill, a "no-strings-attached" subsidy bill, and the Guffey Bill, which called for government control and close supervision, the Congress finally passed the latter, with minor revisions, as the Merchant Marine Act of 1936.

The provisions of the Act may be divided roughly into two sections. First, the United States Maritime Commission may absorb all of the power of previous agencies, and becomes the sole authority in maritime matters; a necessary concomitant is the virtual cancellation of all existing maritime laws, a wiping of the slate, so to speak, so that a fresh and unsullied start could be made. Funds were to be provided by Congressional appropriation, on the recommendation of the Commission, and were to be used within its discretion for the building and operating subsidies the administering of which became one of its most important functions.

The second section of the Act represents a legalistic triumph in that it effectively closes all loopholes in the administration of maritime policy, spelling out in complete detail precisely how each dollar of subsidy shall be applied, and under what conditions.

THE UNIVERSITY OF CHICAGO

1962

TO THE HONORABLE SENATE

OF THE UNIVERSITY OF CHICAGO

IN RESPONSE TO A RESOLUTION PASSED BY THE SENATE

ON APRIL 10, 1962, CONCERNING THE

REVISION OF THE CHARTER OF THE UNIVERSITY OF CHICAGO

AND THE REVISION OF THE BY-LAWS OF THE UNIVERSITY OF CHICAGO

AND THE REVISION OF THE REGULATIONS OF THE UNIVERSITY OF CHICAGO

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AND THE CHAIRMAN OF THE COMMISSION ON THE REGULATIONS AND STATUTES

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For receipt of any federal money, a ship operator must first plan a foreign operation, and submit to the Commission proof of its ability to conduct such a service as it contemplated. The Commission must be satisfied that such a route serves the public convenience, and will then pass along plans for the vessel or vessels to the Navy Department, which decides whether such a ship can be adapted to use in wartime as an auxiliary. If all approvals are secured, bids are requested from shipbuilding companies, and the low bidder is allowed to proceed.

It is at this point that the Commission exercises its first arbitrary function. It must decide, through whatever evidence it has available, what the foreign cost of the same kind of vessel would be, and will then pay the differential directly to the builder. This differential is not ordinarily to exceed one third of the cost of the ship, but in certain cases may be as high as fifty per cent. The operator is required to pay at least one fourth of the cost in cash,⁶ again directly to the builder, and the government, through the Commission and its appropriation, will lend the balance, repayable with interest at three and one half per cent per annum⁷ over a twenty-year period.

⁶"Subsidy or Mortgage?" Literary Digest, July 4, 1936. p. 7.

⁷Bogart, EL, & Kemmerer, D. L. op. cit., p. 722.

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Thus effectively the Commission, if satisfied that all of its requirements are met, will subsidize the owner of the vessel to the extent of the full differential between foreign and American building costs, will lend a substantial portion of the balance, and will in addition pay outright and entirely for any special fittings, such as gun-mounts and anti-submarine devices which the Navy Department has prescribed, and for which presumably the operator would otherwise have no use.

The administrative provisions were written clearly for all prospective candidates to see. Vessels built under the construction subsidy must be maintained in foreign service. If they were removed from that service, or left inoperative, a pro-rata portion of the subsidized part of the cost would have to be returned to the Commission within a reasonable period. Furthermore, all funds would be paid directly to the shipbuilder, who was limited to a ten per cent profit on such a contract, with the requirement that he return any excess to the Commission, and that he keep his books and records available for such inspection as the Commission might require. Further, no salaries in excess of \$25,000 per year were chargeable to such contracts. The specific nature of this kind of provision was, of course, entirely lacking in all previous maritime legislation.

Other provisions of this construction subsidy plan, not especially germane to our study, such as the privilege of trade-in and the exercise of such options by coastwise operators, served to round out fully its adaptability to a reasonably complete solution of the cost-differential problem, which had plagued operators for so many years.

Operating subsidies as well are granted under the terms of the Act, but are not concealed in the guise of mail payments. Certain specific operating costs, such as insurance and wages, are measured against the same costs for foreign companies, and if the Commission decides that a fair estimate has been made, it will pay an operating subsidy of the difference between American operating costs and foreign operating costs in these specific respects, and will make such payments upon the receipt of vouchered and audited proof by the company that such costs have been incurred. What this accomplishes, of course, is to open the financial structure of the company to the scrutiny of the Commission, thereby eliminating most of the possibilities of diversion of funds. Strict rules as to the corporate structure and affiliations of the companies are enforceable insofar as the entire financial background and operating technique of the companies comes under the watchful eye of the Commission.

A further provision stipulates that one half of all profits in excess of ten percent must be returned to the Commission, as a refund on an operation which apparently had

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been too heavily subsidized.

After considerable and literal treatment of such technical requirements as the depreciation and contingency reserves of subsidized companies, under Title VII the Act shows its true earnestness in its hope of establishing an effective merchant marine. Title VII states in effect that should enough operations not be instituted as a result of the inducements otherwise offered, the Commission is authorized to buy, own, and operate its own ships, effectively thereby using the threat of a government-financed competition as a further incentive to the operators to do the job themselves.

It is difficult baldly to attempt to appraise the results of the Act of 1936. Much of the Commission's work was still in the planning and investigating stage when the war in 1939 introduced a variable which makes its later work unable to be isolated for analysis. To questions as to how much of the progress of the late thirties and early forties was attributable to Commission activity and how much to forces of foreign markets, neutrality considerations, and a new and more venturesome capital, we can give no definitive answer. Certainly it would appear that the Act was designed to be the kind of aid which would have induced operators to expand their route structure, even had the war not appeared to inflate profits and serve as incentive

to development. We can see, moreover, from the brief summary of the results of its work outlined above, that to the Commission must go a considerable portion of the credit for rejuvenation of our maritime consciousness.

The provisions of the Act are especially difficult of appraisal when we remember that during 1940 and 1941 our attitude toward the belligerents resulted in the outright sale or gift of many of our overage vessels to England for use in its prosecution of the war. While the tonnage figures would therefore show a relative drop during these years, the general quality of our fleet was improved by raising the average age of the first line ships in operation.

Besides this, the armed services as early as June, 1941, had requisitioned under the presidential authority every passenger vessel of the United States Lines, most of the new ships built for Moore-McCormack's "Good Neighbor" fleet, two of the finest of the President series of the Dollar Line, and many others of smaller tonnage, for use in troop movements to American outposts, and for transport of materiel to maintain those troops. In September of 1939, after the Act of 1936 had been operative for only three years, our total merchant fleet amounted to 8,176,000 tons; its reduction to 5,500,000 tons in June, 1941 can hardly be attributed to any shortcomings of the legislation.

We must necessarily pass over the second World War as an element of a subsidy program, since the national

emergency completely ruled out any considerations of maritime accomplishments for their own sake. The yeoman job which was done by our merchant marine as it became part of our offensive mechanism is already history. As the supreme mover and hauler of all that the fighting forces needed, its place should stand unchallenged. Thus by the very nature of its activity, and the premium put upon its fulfillment of national duty, spares us the task of sifting from that duty the elements of accomplishment which might possibly be integrated into a study of finances and subsidy payments.

Therefore it is to present tendencies and to more current problems that we address ourselves. During the immediate post-war period, under policies ordained in prior years by the Commission, the merchant marine again became a series of operating companies rather than an integrated wartime unit, served admirably in the transporting of goods to a war-ravished Europe and a famine-ridden Asia. As to subsidies in particular, however, we must again consider the problem with regard to maritime activities of the past eighteen months, when the shipping companies have again begun to feel the pinch of a revived and cost-favored competition.

As indicated by Figure 4, during the war years the American merchant fleet carried an increasingly large percentage of a foreign trade which was materially swelled by

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offensive necessities. It was not until earnings statements

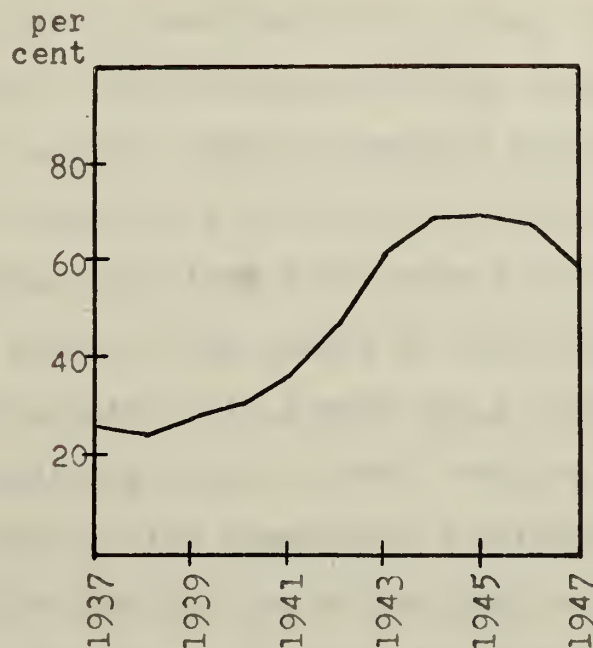


Figure 4. Percentage of American Foreign Trade Carried in American Ships.⁸ 1937-1947, Annual Intervals.

for the first periods of 1948 were reported to the Commission that concern began to be expressed again. Post-war inducements to other and more profitable investments, even with the still strong cooperation offered by the government in the form of subsidies, tended to attract American investors into other fields, and the cheaper transportation furnished to shippers by foreign companies returned as a factor to be coped with. United States Lines, with a drop in net income for the six months' period ended June 30, 1948 to thirty

⁸Business Week, August 7, 1948, p. 82.



FIG. 1. A graph showing the relationship between the amount of water consumed and the amount of water excreted in the urine. The curve shows that the amount of water excreted in the urine is directly proportional to the amount of water consumed.

The amount of water consumed is measured in milliliters (ml.) and the amount of water excreted in the urine is measured in milliliters (ml.).

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THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

CHICAGO, ILL., MAY 1, 1924

nine cents per common share, as compared with \$3.59 for the same period in 1947; American Export Lines, with a drop from \$1.06 per share to 45¢ per share for the same period; and Atlantic Gulf and West Indies Steamship Lines, with a drop from \$1.63 per share to a 52¢ deficit, were typical of a general softening experienced throughout the industry.⁹

Congress had not been remiss in its duties; subsidy levels in appropriation bills were still high. For the fiscal year beginning July 1, 1948, Congress voted a \$94,000,000 fund for the Commission's building purposes, and extended the time for use of the 1947 balance of over \$84,000,000 to September 30, 1948, but there were no commitments arranged.¹⁰ The shipping companies believed the terms too strict in the light of the increasing risks born of the rejuvenation of foreign shipping companies, since the maximum construction allowances of fifty per cent were simply not being allowed by the Commission, which adhered to a general average allowance of thirty per cent of building cost. Therefore, the twelve subsidized companies operating under Commission contracts were not building new vessels.

Furthermore, European aid was effectively helping

⁹Business Week, August 7, 1948. loc. cit.

¹⁰Ibid., p. 83.

foreign producers to regain their place in their own markets, and the need for bulk cargoes, especially grains and coal, was no longer as insistent as it had been, during 1946 and 1947. Fearful of the eventual laying up of their fleets, many of the smaller cargo ship operators have transferred the registry of their ships to foreign countries, especially Panama and Honduras, to escape the high American wage laws and the strict operating standards which our marine registry requires.¹²

Squabbles over the shipping of Economic Cooperation Administration goods have caused stalemates in certain cases as well, since the law authorizing the E C A uses hazy wording in its requirement that fifty per cent of all such goods move in American vessels if they are available "at market rates." Cost-favored foreign countries insist that the market rate should mean the world rate for shipping; the Congress and the Maritime Commission are equally as insistent that this should be the admittedly higher American rate. To the present time the difficulty is not completely settled; although the goods have moved in tremendous volume, it seems inevitable that future efforts at accounting will be marked by policy differences.

It is this last upon which current policies and

¹²Ibid., p. 84.

problems are being predicated. Should the E C A use the most efficient and least expensive means of shipping its goods, or should it patronize the subsidized American shippers, whose presence on the commercial scene has been endorsed by ten years of government payments? This question simply points out once more that the inability of our merchant marine to compete with that of foreign countries is undoubtedly a condition which will always be with us. We cannot require that our seamen receive minimum pay rates higher than the crews of foreign vessels, we cannot insist upon operating standards of safety and performance which are more costly than those of foreign operators, without expecting our shipping to be penalized accordingly by its inability to meet the lower passenger and freight fares of the ships of other countries. If, then, we want a merchant marine, and an effective one, which can immediately be called into play in the event of emergency, and which may ultimately prevent our exploitation by discriminatory rates, then it follows automatically that we must nationally support such an enterprise. Very few American entrepreneurs have shown any proclivity for inaugurating a business from patriotic motives alone.

Consequently in 1939, faced with a situation unfortunately comparable to the last war, the Congress and the Commission have viewed our fleet, in so large part composed

of Victory ships and Liberty ships, neither of long useful life, and neither economical to operate, and reiterated again the policy which has guided our approach for the past decade and more: regardless of economic arguments for or against the subsidy, the United States must always have first line vessels in top operating condition in case of a national emergency. The one certain way of having them was to encourage private shippers to build and use them.

Besides the appropriation mentioned above, itself positive action, the attitude of the Commission has relaxed enough to encourage operators to build new steamships. Contracts have been let for five first line passenger-cargo vessels, three twelve thousand ton ships for the American President Lines(formerly Dollar Steamship Lines), subsidized by Commission ruling to the extent of 44.05% of their \$32,000,000 cost, and two twenty thousand ton ships for the American Export Lines, subsidized to the extent of 45% of their \$47,000,000 cost. In addition, the operating subsidy rates have been reviewed, and in certain cases have provisionally been revised upward.

No new legislation has been passed with regard to subsidies since the Act of 1936, but each new appropriation becomes in effect a review of the need for payments. It is apparent now that the desire for a well-founded merchant marine is no longer a question of national pride or the protection of home industry, but has become a part of

national survival. Twice the United States has entered a World War with insufficient auxiliary shipping; even the threat of war in this current period seems to be enough to adjure the Congress that a fleet must be maintained.

Short of operating steamship companies itself, the Commission must award life-giving subsidies to steamship companies if it is to fulfill its purposes. Whatever the advocates of natural competition may feel, this is the Commission's responsibility until such time as the law is revised.

The pressing economic question against subsidies is a fair one: why should the government pay to help to support an expensive industry, when shippers are perfectly willing to use the cheaper foreign services? In other words, why should we not take advantage of foreign savings, and admit that our standards are too high for us to become a major maritime power.

If dollars and cents considerations were the only problem, such reasoning might seem eminently valid. But national policies become a problem as well. If our merchant marine once again begins a downward trend, unchecked it may not stop until it reaches an effective bottom. We must apparently have either a suitable fleet or none at all; half-way measures have proved ineffective for almost a century. And without a fleet of any kind, it can readily

The first of the two parts of the paper is devoted to the study of the asymptotic behavior of the solutions of the system of equations (1) as $t \rightarrow \infty$. In the second part, the question of the stability of the solutions of the system (1) with respect to the initial conditions is considered. It is shown that the solutions of the system (1) are stable with respect to the initial conditions if the matrix A is negative definite. In the case when the matrix A is not negative definite, the solutions of the system (1) are not stable with respect to the initial conditions.

It is also shown that the solutions of the system (1) are stable with respect to the initial conditions if the matrix A is negative definite. In the case when the matrix A is not negative definite, the solutions of the system (1) are not stable with respect to the initial conditions. It is also shown that the solutions of the system (1) are stable with respect to the initial conditions if the matrix A is negative definite. In the case when the matrix A is not negative definite, the solutions of the system (1) are not stable with respect to the initial conditions.

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be imagined what would be the plight of the American producer, dependent upon foreign markets, should the government-subsidized foreign companies decide to impose discriminatory rates upon American cargoes to protect their own markets.

Even this, though, is of minor importance. National defense and our survival in time of war have become a significant part of our approach to marine policy. The United States must not find itself without overseas carriers in another crisis.

This is not to give unqualified support to a subsidy system. A history which makes an effort to restrain itself from a partisan approach is not the vehicle for such conclusions. However, the exigencies of the twentieth century have pointed the way to a constructive maritime policy, of which the subsidy and its administration have become a powerful instrument. It is true that there have been serious abuses of the subsidy, but it is equally true that the avenue to most of these abuses has been blocked by more careful legislation. It is indeed unlikely that the future will exhibit any relaxation from this strictness.

Properly administered, it is apparent that the subsidy is not fundamentally evil, nor is it anachronistic, nor is it the tool only of the United States. All nations, cost-favored or not, which have made an effective bid for marine supremacy have used it, with varying success. Whether we

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will or no, as a policy-making instrument the subsidy is here to stay. History alone can appraise its effects upon the period which we are now entering, and alone can decide whether the choice of the subsidy was consistent with our national welfare.

CONCLUSION

It is apparent from our study that it is impossible to evaluate the ship subsidy program entirely without regard for other factors; subsidy legislation has too often closely antedated a war, a depression, or some other severely dislocating series of circumstances for us even to attempt to consider it in an economic or social vacuum.

It is also apparent from our analysis of legislation designed to help us to compete with subsidy-paying foreign powers, and from our perusal of the historical elements of our commercial status, that the subsidy is indispensable to an effective Merchant Marine, and that from military and political considerations, as well as from economic, our maritime position must be ensured by such policies.

With all its limitations, the subsidy remains the most complete solution yet presented by our lawmakers. We have found that two major factors prevent our shipping companies from effectively competing for carriage of our products: first, the cost structure of our shipping industry is the highest in the world; and second, the subsidy policy of other nations has widened still further the differential and gap between American and foreign rates.

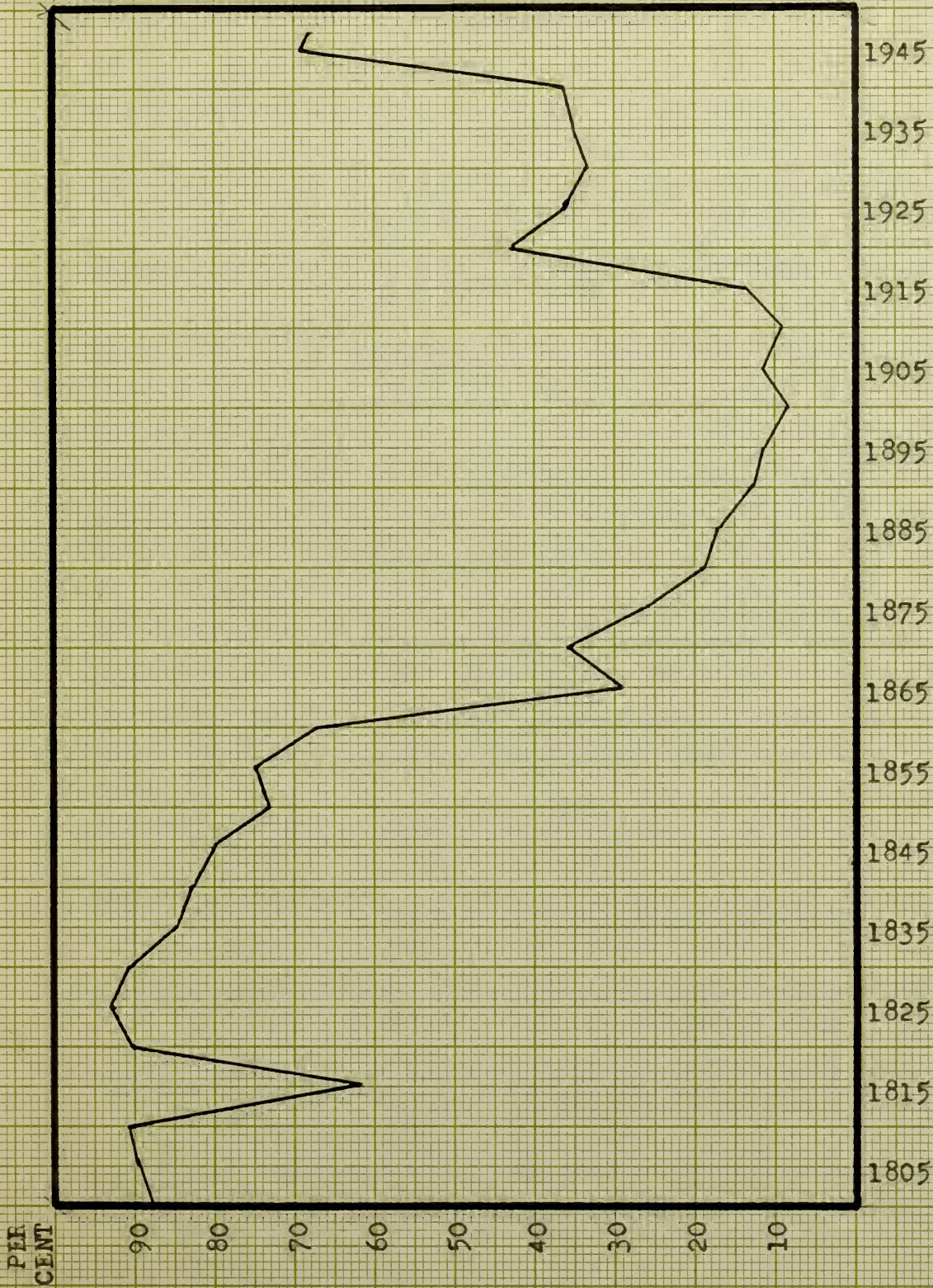
If we concede only that our national security warrants some national effort toward the maintenance of a competent

and operative Merchant Fleet, we must then automatically concede the necessity for concessions by our government to ensure that such a happy eventuality be sedured.

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Percentage of American foreign trade carried in American vessels, 1800-1947, five-year intervals.

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1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the integrity of the financial system and for the ability to detect and prevent fraud.

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Page 1 of 1

Abstract of Thesis

With the founding of our Republic, we began an awareness of our maritime status which has been instrumental during several periods of our history in persuading our lawmakers to attempt to restore a declining merchant marine by means of federal subsidy payments. Although our first Congress was not so hard-pressed as to allow federal payments for the fostering of the shipping industry, it did by several methods make it known that the shipping supremacy of the colonial period should not be sacrificed for other considerations. With bounties and discriminatory duties, with tariffs and tonnage allowances, our marine was protected from the effects of world-wide competition, and this at a time when our tradition and our resources made shipping a natural adjunct to our economy.

After the formative period of our commerce, which ended at approximately the same time as the War of 1812, we entered an age of shipping when the Yankee sailing vessel was the carrier of many of the world's cargoes, when the American flag was seen in every port, and Congressional efforts could justifiably be postponed. The era of the clipper was indeed the "golden age" of our shipping.

So complacent were we in our ascendancy that we neglected entirely to develop steam engineering, which began profitably

CHAPTER 10

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to be used at this time by other countries. By the time our efforts were implemented, other nations had far outstripped us, and our first subsidy act, the Act of 1845, was almost completely ineffectual in placing American steam shipping on the high seas. The Act of 1847, largely favoring the ill-fated Collins Line, was only slightly less abortive, and its abrogation after the expenditure of great sums of money with no permanent result, precipitated us into a period of decline from which only World Wars and new subsidies could raise us.

While other governments became more and more generous to their shipping companies, paying them millions of dollars in mail contracts, we enacted the penurious Ocean Mail Act of 1891, which produced so little result as hardly to be worthy of note. Only insofar as it indicated a stirring of the American public toward solution of the problem of a destitute shipping industry is this legislation important in our history.

The true awakening, which was to consume so many years before its culmination in today's realistic approach, began with the first World War, when a hastily conceived Shipping Act endeavoured to fill the breach with its Emergency Fleet Corporation, mother of the war-born, inefficient, and costly fleet of 1918. Although long-range plans must necessarily under the circumstances have been relegated to a secondary position by the exigencies of war, it is apparent

that here lay the germ of modern legislation, if only as reflected in the realization of the government's place in our maritime commerce.

The Merchant Marine Act of 1920 was our answer to the postwar problem of fleet transferral and the need for new subsidies. A normalcy-ridden Congress reduced the effectiveness of the latter, but the fleet was disposed of at prices low enough to attract at least small portions of private capital into the field. Though by no means enough, this entrance of the entrepreneur, and the slight expansion of existing route structures, indicated what proper legislation could accomplish if the Congress would provide it.

Faced with this realization, and aware of the new and productive efforts consistently being made by foreign governments, the Congress in 1928 passed a new act, similar to its predecessor, but extending its provisions in such a manner as actually to accomplish a portion of the result for which it was drafted. Ships were built, others were repaired, and although the award of mail contracts was injudicious or ineffective in some cases, this was more productive lawmaking than had been done before for the maritime industry.

Modern policy was reflected first in the Merchant Marine Act of 1936, under which our present policy still operates. Brought about by administrative difficulties in the Act of 1928, and by a new and aroused national cognizance of the shipping problem, the Act created the United States Maritime

Commission, with sweeping powers for the fostering and regulating of our foreign commerce. Both construction subsidies and operating subsidies were awarded, and the opening of the second World War found us, though unprepared, in much better position than any previous legislation could possibly have guaranteed. In spite of the dislocations of the War, it is apparent that the Act was instrumental in the reattainment of maritime power.

Presently we have apparently decided to consolidate the gains which were produced in our shipping industry by the new policies and by the necessities of war. Alarmed by the reversal of trend, which showed us immediately after the War carrying a larger percentage of our foreign trade than we had in many years, the Congress has been eminently generous, and the Maritime Commission has returned to its original realism, which recognized that the American dollar is after all the determinant for success in the private shipping field. It is to be hoped that this trend toward active participation and help will continue, and that we will not again at some future date be faced with a dwindling marine, and the necessities which make it unadaptable to our national needs.

The subsidy program has become a fixture in our economy, unless present thinking be drastically revised. There is no present indication that such a forthright and unwarranted

change in policy is planned, and we can therefore hope to be permanently assured of the marine to which our tradition entitles us and which our economy demands.

1. The first part of the report deals with the general situation of the country and the position of the various groups of the population. It also deals with the economic situation and the social conditions of the country.

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